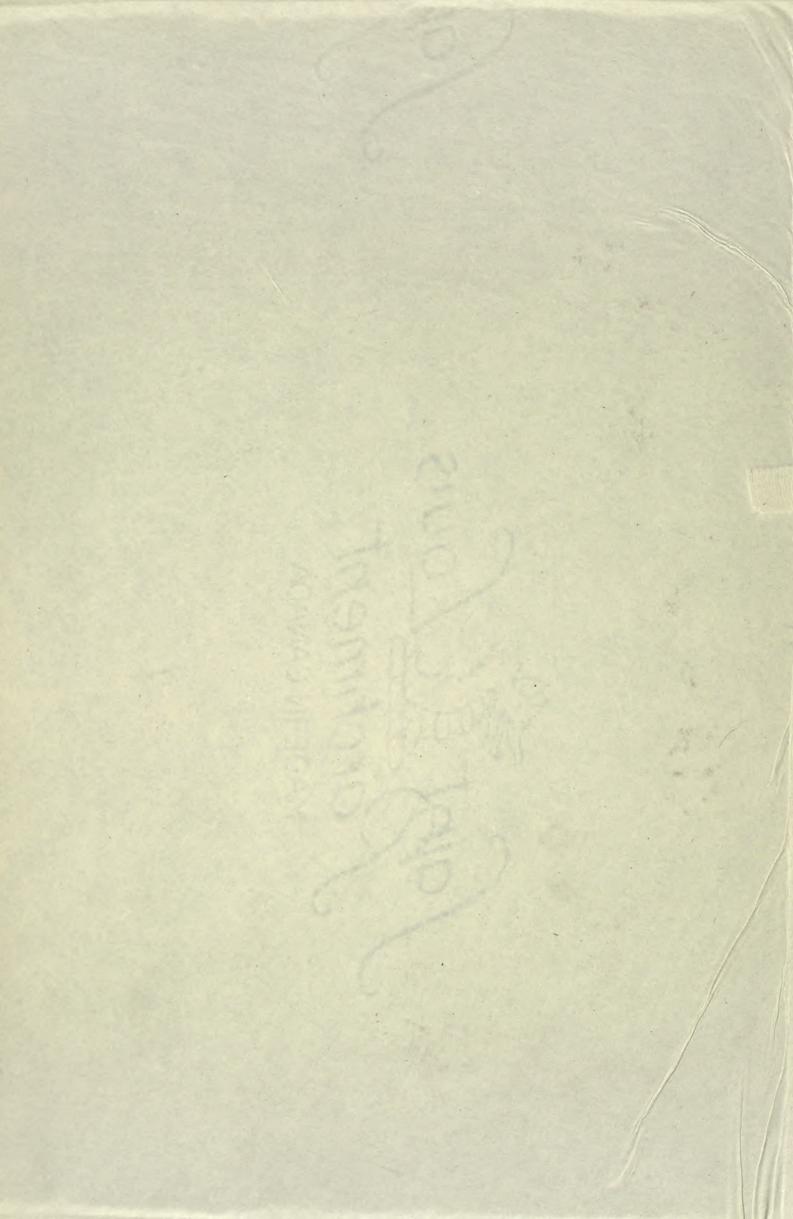
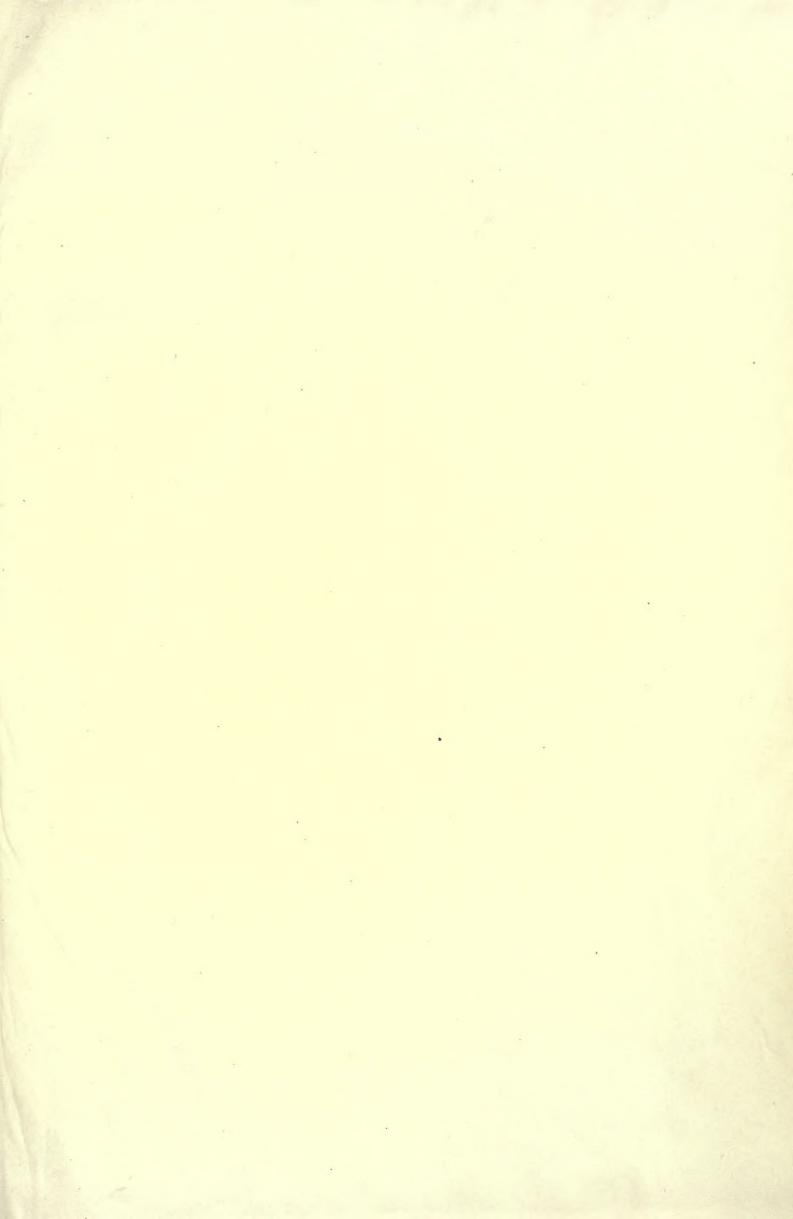


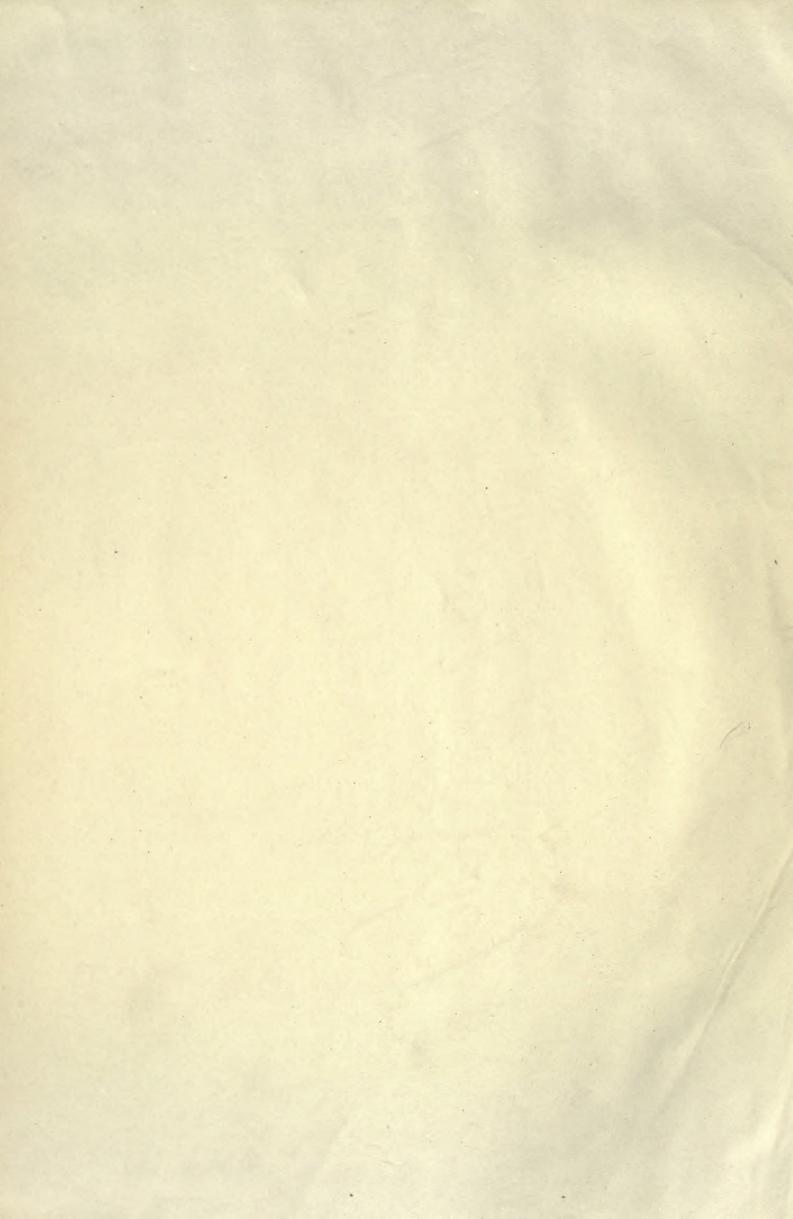
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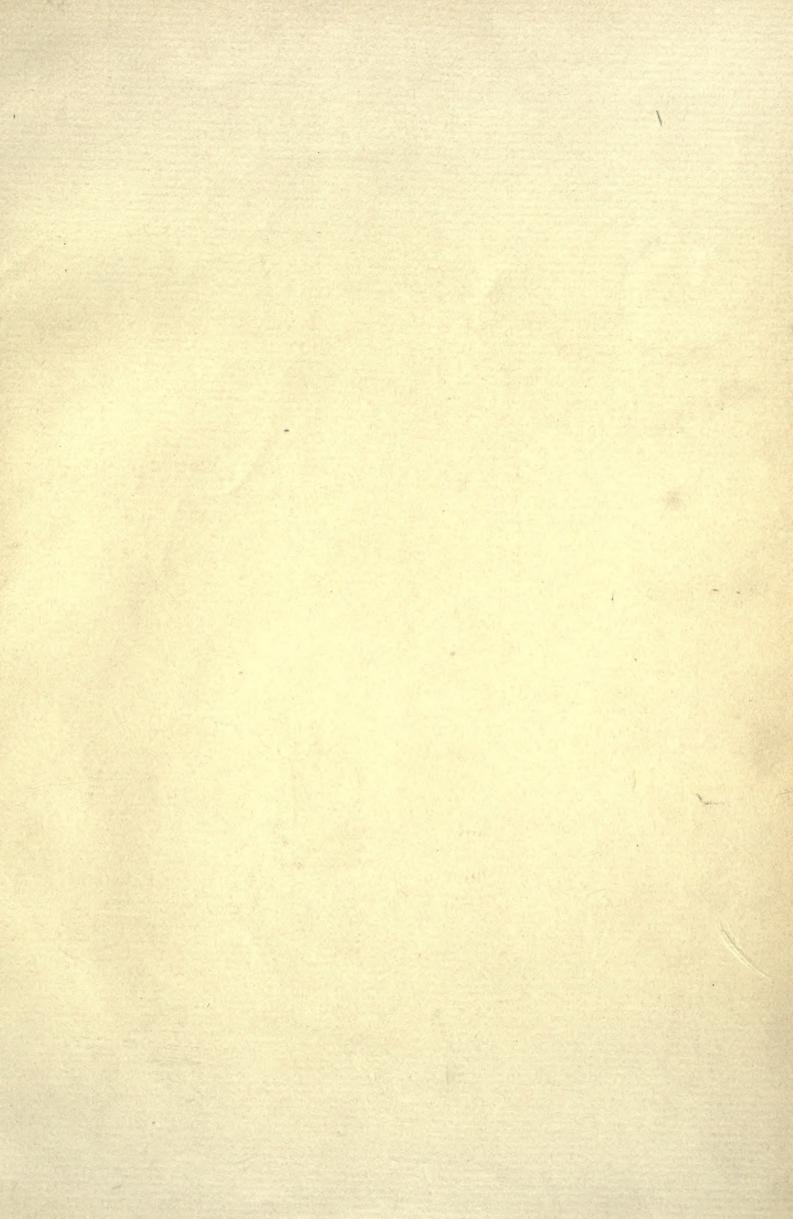


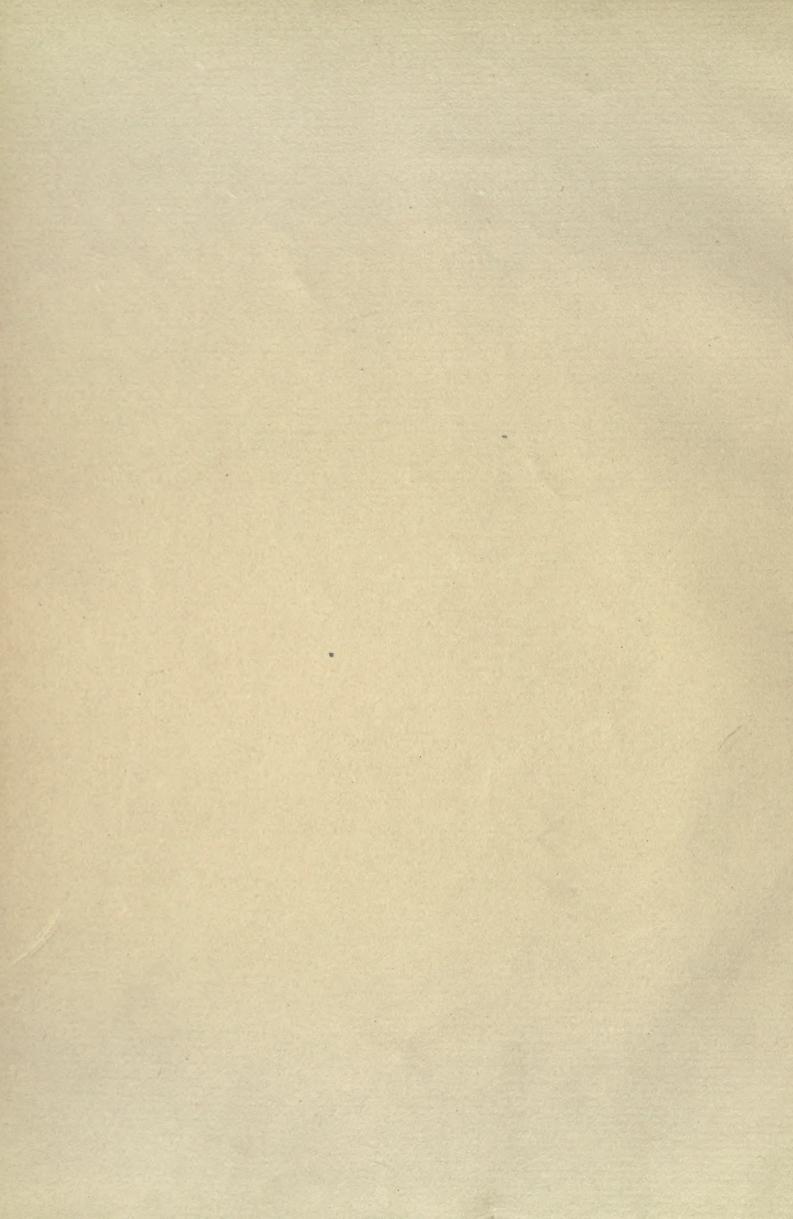












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## THE BERNARDINI TOMB.

C. DENSMORE CURTIS.

(PLATES 1-71)

I.
INTRODUCTION.

ABOUT the middle of the VIIth century B. C. the Etruscans had become a wealthy and powerful people. They were in commercial relation with the countries of the East, and imported freely their artistic products. They also became themselves producers of works of art, at times employing forms and motives which had long been known in the West, and at times attempting to imitate, with more or less indifferent success, the designs which they received from other lands.

Much of this material has been preserved in the tombs of the period, which rank among the richest and most important ever discovered. The majority of these burial deposits were found during the 19th century, and have long been known to scientists. For various reasons however none of the most important have ever been properly published!, and for many of the details the archaeologist who has not direct access to the material still has to rely on the inadequate drawings which date from the time of the original discovery. The present catalogue is an attempt to make more accessible to the public one of the richest of these tombs, the Bernardini, of which the contents are exhibited in the Museo Preistorico in Rome.

The tomb was discovered in the year 1876 at Palestrina, and given the name of the Bernardini brothers who furnished the money for the excavation after making an

<sup>1</sup> For the Barberini tomb in the Museo di Villa Giulia no complete catalogue exists; for the Regolini-Galassi tomb in the Vatican, the gold objects alone have been fully published, by PINZA and NOGARA, Museo Etrusco Gregoriano, Materiali per la etnologia antica Toscano-Laziale, Vol. I (Milano, 1915). Vol. II is still in

press. The enormous amount of comparative material in this publication makes its use as a catalogue somewhat difficult. Other important tombs, from Palestrina, Veii, Corneto, Vulci and Vetulonia, to mention but a few of the sites, have been only in part described, and never with a complete photographic record of their contents.

agreement with the owners of the land, the Frollano heirs, to share whatever might be The excavation was carelessly conducted, and no accurate record was taken as the work progressed. The bones of a burial are said to have been found, but none were preserved 1. To judge from the analogy of other sites, the tomb must have contained pottery, but if so all of the fragments were thrown away, with the probable exception of the four proto-Corinthian fragments described under No. 63. Even the smaller bits of gold foil were discarded, and the small boys of the neighborhood made several francs a day by working over the dump heap after the workmen had left, and selling to a local jeweler the gold fragments which they found2. In spite of this lack of care, however, a remarkable group of objects was preserved, of gold, silver, bronze, iron, amber, ivory, glass, wood and leather, some of manifest Eastern origin, and some of local workmanship. The entire collection was held for a large price for a time, but was finally sold to the Museo Kircheriano (now called Museo Preistorico) for the very low sum of 70,000 lire<sup>3</sup>. It was installed in the last room to the south, on the east side of the building, and there it still remains, in spite of the fact that the rest of the museum now contains only prehistoric antiquities, and the other Etruscan and Roman objects have been removed to the Museo di Villa Giulia and the Museo delle Terme. I am indebted to Professor Pigorini, director of the museum, not only for permission to photograph the collection and publish the present catalogue, but also for his very valuable advice concerning several difficult problems, and for his unfailing courtesy and assistance during the long period required for photographing and studying the objects. The photographs are all due to the skill and patience of Pompeo Sansaini, and furnish still another proof of his unusual ability at work of this nature. The generous gift of 5000 lire from Mr. R. Leprestre has made possible the publication of the entire series of photographs.

H.

# LITERATURE ON THE SUBJECT, AND ABBREVIATIONS EMPLOYED.

At the time of the discovery of the Bernardini Tomb, a brief account of the excavation and a description of the more important objects appeared in the Notizie degli

commission to decide on the authenticity and value of the find. At the end of the report of Conestabile (N. S., 1876, pp. 282 (113)-295 (126)) will be found the sworn statement of three archaeologists, Fabretti, de Petra and Minervini, that the treasure was genuine and all of one period, and that it would be a grave mistake to allow it to be sold to some foreign museum.

See also BARNABEI, Museum, Boll. della Repubblica di San Marino, Anno I, No. i, 1917.

<sup>&</sup>lt;sup>1</sup> See the last page of this catalogue for one finger bone which is said to be from the tomb. (N. S., 1897, p. 256, note 1).

<sup>&</sup>lt;sup>2</sup> This fact I learned from Sig. Cesini, now custodian of antiquities at Palestrina, who was a boy at the time of the excavation, but remembers it very well.

<sup>&</sup>lt;sup>3</sup> For some time after their discovery the objects from the tomb were thought to be forgeries and therefore, at the request of the Ministry of Public Instruction, Conestabile and a number of others formed a special

Scavi (abbreviated in the catalogue as N. S.) for 1876, pp. 85 (21) ff.; 113 (40) ff.; 236 (70) ff. In the same volume, pp. 282 (113) ff., is a brief but excellent description of the entire find by Conestabile. In the Bullettino dell'Instituto di Corrispondenza Archeologica (Bull. Inst.) for the same year is an account by Helbig of the excavation, in which he gives some information concerning the shape of the tomb and the relative position of the different objects which it contained. His account, however, falls short of our modern standards of scientific accuracy.

In the Annali dell' Instituto (An. Inst.) for 1876 (pp. 197-257) is a long article by Helbig on Phoenician art, ending with a description (pp. 248-254) of four plates (XXXI, XXXII, XXXIII) which appeared at the same time in Vol. X of the Monumenti dell' Instituto (Mon. Inst.). These plates contain a number of drawings of the Bernardini treasure. They give some idea of the value of the collection, but leave much to be desired from the standpoint of accuracy. In the Annali for 1876 (pp. 257-294) also appeared an article by Fabiani on the mythological representations in the Bernardini collection. Additional drawings of the specimens were published on Pl. II of Vol. XI of the Monumenti, and on supplementary Pl. C of the Annali for 1879, and in the last mentioned volume (pp. 5-18) is a description of both plates.

A short and picturesque account of the treasure will be found in Dennis, Cities and Cemeteries of Etruria, 3rd ed., pp. 499-503. Fernique mentions a few of the specimens in his Etude sur Préneste, but so briefly that no reference has been made to his work in this catalogue. In Helbig's Fübrer (see below) is a more detailed account of the more important objects. Descriptions of a few of the specimens have appeared in scientific publications from time to time, and will be noted in the proper places in the present catalogue. These descriptions make use for the most part of the faulty Monumenti drawings, and only in a few cases have the objects been photographed. The best series of photographs is found in the recent catalogue by Pinza of the Etruscan Museum in the Vatican (see below for complete reference). In Vol. I of this catalogue are seven large plates of the most important gold and silver objects from the Bernardini Tomb, and a complete catalogue of the tomb is promised for Vol. II, which is still in press. Some care must be used in the study of these plates as five of them are reversed. Poulsen in his very useful work, Der Orient und die frühgriechische Kunst, also has a few photographs, and brief, but good descriptions of a few of the objects, and Graeven (see below) reproduces a number of the ivories on four of his plates.

To avoid unnecessary repetition, in the present catalogue the volumes to which most frequent reference is made will be cited merely by the name of the author, as follows:

DENNIS, - Cities and Cemeteries of Etruria, 3rd ed., London, 1883.

FALCHI, - Vetulonia e la sua necropoli antichissima, Firenze, 1892.

Graeven, - Antike Schnitzereien aus Elfenbein und Knochen in photographischer Nachbildung, Serie 1, Hannover, 1903.

Helbig, - Führer durch die Sammlungen klassischer Altertümer in Rom, 3<sup>rd</sup> ed., 1912. Marshall, - Catalogue of the Jewellery, Greek, Etruscan and Roman, in the British Museum, London, 1911.

Montelius, - La civilisation primitive en Italie, I, Stockholm, 1895; II, 1905 and 1910.

- Chron., - Die vorklassische Chronologie Italiens, Stockholm, 1912.

PERROT, - PERROT and CHIPIEZ, Histoire d'Art.

PINZA, - PINZA and NOGARA, Museo Etrusco Gregoriano, Materiali per la etnologia antica Toscano-Laziale, Vol. I, Milano, 1915.

Poulsen, - Der Orient und die frühgriechische Kunst, Leipzig-Berlin (Teubner), 1912.

#### III.

#### THE TOMB.

The only information we possess concerning the form of the tomb is found in the brief report in the Notizie 1 and in the longer account by Helbig in the Bullettino 2. Unfortunately Helbig did not see the excavation until it had been in part filled in, otherwise we might be better informed concerning some of the uncertain points.

The tomb was discovered in a vineyard about 160 m. to the south of the little church of S. Rocco, on the west side of the narrow via di Loreto which runs south from the via Praenestina, starting from beside the church. No record exists of the exact spot in the vineyard where the tomb was found. Helbig merely says it was located " a few steps from the road ". After several days of fruitless search the excavators came upon some broken slabs of tufa and limestone, quite near the surface 3, and below these found a nearly rectangular enclosure, called by Helbig a " fossa ", something over 1.70 m. deep, and lined with large rectangular blocks of tufa in several courses, of which four could be counted in the part where they were best preserved. The largest of these blocks was 0.91 m. in length and 0.90 m. high. Each of the two long sides (north and south) of the so-called "fossa " 4 was 5.45 m. in length, and was orientated on a line running east and west. The east side was 3.80 m. in length; the west side slightly longer, 3.92 m. In the bottom of this enclosure was found a trench (called *incavo* on Fig. 1) about 2 m. in length, located, not in the center, but nearer the south wall, and containing the more

<sup>&</sup>lt;sup>1</sup> N. S., 1876, p. 85 (21). <sup>2</sup> Bull. Inst., 1876, pp. 117 ff.

<sup>&</sup>lt;sup>3</sup> N. S., 1876, p. 85 (21).

<sup>&</sup>lt;sup>4</sup> See Fig. 1, reproduced from Bull. Inst., 1876, p. 120.

important gold and silver objects. By the time Helbig reached the site the trench had been filled in, and the bottom of the large enclosure was covered by earth which had fallen from above. He was told by the excavators that the trench had contained bones, and that these had been thrown away. The rich burial deposit was scattered about the large enclosure at points indicated by letters on Fig. 1.

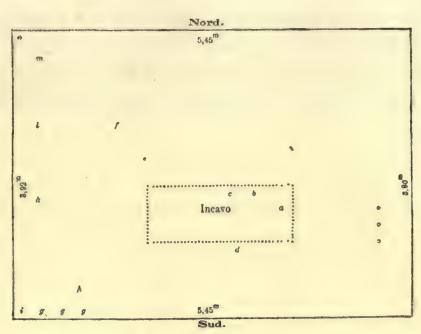


Fig. 1. Plan of tomb.

As no trace of a door was noticed, Helbig came to the conclusion that after the burial, earth was thrown over the body and the burial deposit, after which the entire enclosure was covered over with rough slabs of stone, and then by an additional layer of earth. Judging from the analogy of the Regolini-Galassi tomb, and the contemporary tombs at Castellina in Chianti and elsewhere, it is more reasonable to suppose that the tomb had the usual dromos and doorway, and also a corbelled vaulting which in the course of time caved in 2. That no door was noticed was probably due to lack of attention on the part of the excavators, and to the fact that only the inside of the enclosure was cleared 3. The presence of rough blocks of stone where one would expect to find regularly shaped voussoirs can be explained by the fact that the peasants had planted a vineyard on the site before the discovery of the tomb. At the time of such planting it is their custom to work over the earth thoroughly to a considerable depth, breaking up the more friable material whenever possible, and carrying away the larger pieces of stone. At such a time the cavedin roof of the tomb might easily have been reduced to the state in which it was found by the excavators, without causing the peasants to suspect that they were so near a rich burial deposit.

Still another proof that the enclosure was roofed over is found in the presence of sheaths (Nos. 90-95 in the following catalogue) for the corners of a wooden funeral couch.

the lining walls had been laid bare. According to the Notizie (N. S., 1876, p. 115 (42)) the surrounding area was explored at a later period, but this was doubtless by means of trenches, and no more attention was paid to the original tomb or its enclosing walls.

<sup>&</sup>lt;sup>1</sup> N. S., 1916, pp. 263-281.

<sup>&</sup>lt;sup>2</sup> PINZA, Bull. Comm., 1898, pp. 188 ff.

<sup>&</sup>lt;sup>3</sup> This appears from the statement by Helbig (Bull. Inst., 1876, p. 118) that by the time of his arrival earth had fallen into the enclosure from the sides of the excavation. This could not have happened if the outside of

Burials with furniture of this description are a characteristic of chamber tombs, but not of trench graves. It is also stated by Helbig 1 that the shields (Nos. 82, 84) were found adjoining the sides of the enclosure as if they had once been suspended from nails in the walls, as they were, for example, in the Regolini-Galassi tomb at Cervetri 2.

IV.

THE BURIAL DEPOSIT: ITS CHARACTERISTICS AND DATE.

Inasmuch as Helbig was not present during the entire period of excavation, for many of the details shown on his plan (Fig. 1) he must have relied on information gained by questioning others, and one should not place too much confidence in all of the statements. According to Helbig, at the east end of the narrow trench (point a, Fig. 1) was found the large gold plaque (No. 1) ornamented with 131 tiny animals in the round. This point is supposed to correspond to the head of the body. Adjoining was the gold fibula No. 2, and the two gold-covered silver clasps, Nos. 16 and 17 (at b). At c were found the three gold-covered tubes, Nos. 4-6, and the silver wire, Nos. 12-15, belonging with them. Outside the trench at d, 50 cm. from the east end, were found four iron lance heads with traces remaining of the wooden shafts (See No. 89), and the two daggers, No. 27 of bronze 3, and No. 28 of iron, both with silver sheaths. At e and f were the bronze sheaths, Nos. 90-95, of the funeral couch or couches. At g, g, g were fragments of three shields (probably No. 82). Near these (at b) was the gold cup No. 20, with the four small sphinxes perched on the handles. At i were numerous ivory fragments with ornamentation in relief or incised (Nos. 45-55). Along the walls were the numerous silver and bronze vases and also the tripod (No. 72) with the human and animal figures peering over the edge into the bowl. Near k beside the west wall were found the gold covered silver bowls Nos. 23-25, with incised and embossed bands of decoration, and silver bowl No. 26 with the Phoenician inscription. At l near by were fragments of bronze vases and more ivory fragments. Near the north-west corner of the tomb, at m were traces of numerous wooden utensils (see Pl. 69), and at n, fragments of another shield 4. Near the east wall (at o, o, o) was the large cauldron No. 75, and several bronze figures which have been restored, and apparently correctly, as belonging to sheaths Nos. 90-95, which were found on the other side of the tomb. It is therefore probable that Helbig was mistaken in placing these figures at o.

<sup>&</sup>lt;sup>1</sup> Bull. Inst., 1876, p. 124.

<sup>&</sup>lt;sup>2</sup> PINZA, p. 116.

<sup>&</sup>lt;sup>3</sup> See p. 45, note 3.

<sup>4</sup> See under No. 82.

Some of the above enumerated specimens are of great artistic excellence, while others were clearly made by unskilled workmen. It does not seem reasonable, however, to decide on the provenience of the objects on the basis of their technical perfection, and to say that all that is good was imported from the East, and that the inferior pieces were local imitations.

A careful study shows a remarkable unity running through the entire series, both in the technique and in the motives employed. In the case of certain of the gold objects, the forms are peculiar to the West, and it therefore seems reasonable to suppose that they were of local make. On the other hand, the technique employed in their manufacture, and the motives used in their decoration, differ in no marked respect from those used in the East, a fact which may be explained by the presence of workmen imported from the East who labored to suit the local demand <sup>1</sup>.

The silver bowls Nos. 23-26, and certain of the bronzes, (as, for example, the winged figures and griffins on cauldron No. 75) have exact counterparts from Eastern sites, and seem without doubt to have been imported. Even many of the roughly modelled bronzes, (for example, sheaths Nos. 90, 91) have purely Eastern motives and seem to have been of foreign origin. From the analogy of certain characteristics of their technique, such as the triangular heads of the male figures with the features barely indicated, a similar provenience might be deduced for the bronze clasp No. 71, and the crude male figures which peer over the edge of tripod No. 72.

Another group of probably imported objects is formed by the ivories. Many of their motives are quite different from those employed on the silver bowls, and it seems clear that they were made by workmen who were trained in a different school, and probably in a different country. The various motives are discussed at length under each number. For an example it will suffice to refer to the two types of chariots, one with a six-spoked wheel on the ivories, and one with eight spokes on the bowls <sup>2</sup>.

The bronze bowl No. 64 is ornamented with several heads in high relief which have the same features, and the same head-dress formed of horizontal layers, that are found on Rhodian jewelry of the period. Here again the evidence is in favor of importation.

The shields and many of the bowls, and also the minor objects of bronze and iron, have the same forms which occur in other Etruscan tombs of the period. Here the presumptive evidence is in favor of local origin.

The date of the tomb is discussed at length by Montelius 3, Karo 4, Modestov 5,

<sup>&</sup>lt;sup>1</sup> HELBIG, I, p. 389; CURTIS, Memoirs Am. Acad. in Rome, I, 1917, p. 79.

<sup>&</sup>lt;sup>2</sup> See pp. 34, 59.

<sup>&</sup>lt;sup>3</sup> Montelius, Pre-classical Chronology in Greece and Italy, Journal Anthropological Inst., XXVI, 1897, pp. 261-

<sup>266;</sup> Chron., pp. 170 f.

<sup>4</sup> KARO, Bull. Pal. It., 1898, pp. 144-161.

<sup>&</sup>lt;sup>5</sup> Modestov, Introduction à l'histoire romaine, pp. 453 ff.

Helbig <sup>1</sup>, Pinza <sup>2</sup>, Lorimer <sup>3</sup>, Poulsen <sup>4</sup> and others. The majority of scholars agree that the dating suggested by Montelius is too early, and that the burial must have taken place sometime in the first half of the VII<sup>th</sup> century B. C., a conclusion in which I also concur.

V.

### RECENT ATTEMPT TO RE-EXCAVATE THE TOMB.

The unsolved problems connected with the Bernardini tomb are so many in number that in June 1917 the late Professor Colini, then director of excavations for S. Etruria and Latium, very kindly promised to re-excavate the site as soon as war conditions made it possible. At that time it appeared a simple matter to re-discover the tomb, and it was hoped, not only to settle the question as to its original form, but also to discover fragments of pottery, ivory etc., discarded as of no value by the original excavators. For one reason and another it was not possible to commence work until Nov. 26th, 1918. At that time the government came to an understanding with the lessees of the vineyard, and inspector N. Malavolta was sent to Palestrina to supervise the work. Almost at once the difficulties of the task became evident. The vineyard is quite large, and no record exists of the exact spot where the tomb was found. By instituting inquiries in the neighborhood we were able to find a number of the older peasants who had either assisted at the original excavation, or who had at least seen the work as it progressed. They were all certain that they could point out the site of the tomb, but unfortunately no two of them could agree. It was also claimed by several of these men that at the time of the original excavation the tufa blocks were carried away and used for building material in the town, and this seems the most reasonable explanation of the fact that during four weeks of labor no trace of the tomb was found. Four long trenches were dug to depths varying from 2 to 4 m., and in addition the entire vineyard was tested by means of a sounding rod, without finding traces of the tufa walls. Fig. 2, from a drawing kindly furnished by Prof. E. Gatti, shows the location of the main trench, and the few bits of later constructions which were found.

In the course of the excavation it was seen that the earth had been worked over by previous excavators to a great depth, and that there is little hope of ever finding anything on the site. This is a negative result, but of value as showing that everything possible has been done to settle the problems, and I wish to express my most sincere thanks to the Direzione degli Scavi for their most generous and disinterested assistance. The

<sup>&</sup>lt;sup>1</sup> Helbig, I, pp. 388.

<sup>&</sup>lt;sup>2</sup> PINZA, Rőm. Mitth., 1907, pp. 145 ff.

<sup>&</sup>lt;sup>3</sup> LORIMER, J. H. S., 1912, p. 343.

<sup>&</sup>lt;sup>4</sup> Poulsen, pp. 36 f.

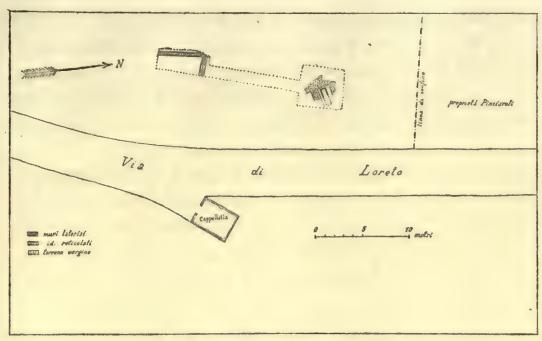


Fig. 2. Main trench, excavation of 1918.

premature and much regretted death of Professor Colini makes it impossible to thank him in person. To his assistants, E. Stefani, Dr. Lugli and N. Malavolta I am more than grateful for their friendly aid and unfailing courtesy.

VI.

# LIST OF SEVERAL PLACES IN WHICH THE PRESENT CATALOGUE ADDS SOMEWHAT TO PREVIOUS KNOWLEDGE OF THE BERNARDINI TREASURE.

For the benefit of those who have not time to read through the entire catalogue, and who wish to find without delay the newer material, reference might be made to the following points:

- No. 2 B, The Manios fibula is probably not from this tomb.
- Nos. 10, 11, The technique employed is unique, and has never been described before. A suggestion is also made concerning the use for which these objects may have been intended. The gold is applied in a thick sheet, and no mercury gilding is employed either here or in the other specimens from this tomb.
- No. 18, Note the Hittite parallel to the additional head on the fibulas.
- No. 23, The decoration on the bottom of the bowl consists of four distinct scenes separated by palm trees.
- No. 25, The interpretation of the story of the hunt differs in several important particulars from that given in earlier descriptions.

- No. 26, The inscription is Phoenician, but not Carthaginian. (See p. 44).
- No. 27, The presence of a gold band ornamented with granulations surrounding the handle has not been noticed before.
- Nos. 45-55, Note that many of the ivory fragments have been fitted together. Of special importance are the following:
  - Pl. 35, Figs. 5-9, Part of a seated female figure.
  - Pl. 36, Figs. 1-6, Addition of several fragments belonging to the chariot, and discovery of the fact that it had a six-spoked wheel.
  - Pl. 37, Figs. 3-5, Restoration of part of a hunting scene, with a dog running beneath a horse (an Eastern motive).
  - Pl. 37, Figs. 8-10, Restoration of the stag's head from a hunting scene (also Eastern).
  - Pl. 37, Figs. 22-23, Fragment of an ivory lion with dead human being on its back, as in the Barberini collection.
  - Pl. 39, Figs. 11-13, Small male figure of ivory, with Syrian locks.
- No. 64, This bowl with decoration in high relief, and also bowl No. 69 and four paste heads, all belong together.
- No. 84, The so-called "tubes" are really handles of shields.
- Nos. 90, 91, Note that the feather crowns, Syrian spiral locks and other Eastern details are consistently employed, showing that the sheaths may have been imported.

Among the objects shown on Pls. 69-71 are a number of fragments from two trays in the storeroom of the museum which have never been exhibited as coming from the tomb. One of these pieces assists materially in restoring the ivory chariot shown on Pl. 36 (see above).

#### VII.

## CATALOGUE OF THE OBJECTS FROM THE BERNARDINI TOMB.

The following catalogue makes use of the small brass numbers attached to the specimens in the museum. The sequence is not always logical, but in the main it is based on the material employed. The numbers run from 1 to 89. There exists in the museum a brief and incomplete description of the collection up to that point. This list is referred to in all cases as the "inventory". The few objects not included in the list have been given consecutive numbers, for the sake of convenience, although these specimens are without numbers on the museum shelves. The museum does not possess a complete or accurate inventory.

1. Pl. 1, Figs. 1, 2; Pl. 2, Figs. 1, 2. Large rectangular plaque <sup>1</sup> of pure gold, ornamented with three tubes, two human heads, and 131 animals and birds, all of gold and decorated with granulated lines <sup>2</sup>.

The plaque is 17 cm. long and 6.7 cm. broad. Projecting from each of the long sides are 16 tongues, all with rounded ends except the four at the corners, which are rectangular. As the under side is roughly finished (Pl. 1, Fig. 2), the plaque was probably intended to be seen only from above, unless possibly some other object was once attached beneath and concealed the inequalities. On the upper side are attached the three tubes, two of which (6 mm. in diameter) rest one on each of the short ends of the plaque. The third (8 mm. in diameter) joins the centers of the two end tubes, and thus bisects the plaque lengthwise. The two end tubes are each 10.5 cm. in length. They cover the rectangular corner tongues of the main plaque, project somewhat beyond them, and end in lion heads. Both are ornamented with double lines of granulations forming a meander pattern, and the lion heads are decorated with granulated lines. The bisecting tube is open at the ends, and touches the outer tubes with no connecting link, although its open ends are bent over somewhat to follow their curving sides. This central tube is ornamented on either side with two horizontal rows of wave pattern filigree, bordered above and below by rows of parallel wires. On the upper side of the tube are 9 recumbent animal figures in the round. They are made, as are all the others on the plaque, of two corresponding plates of gold, beaten into a mould to receive their form, and then soldered together and ornamented with granulated lines. The granulations are in single rows except where they follow the lines of soldering along the backs of the animals, and there the rows are double. On the center of the tube is a composite figure formed of two lions' heads and forequarters, joined together back to back, thus giving the impression of a single body with a head at either end. Each head is turned backwards and faces a third and smaller head, whether human or animal it is difficult to decide, which rises from the center of the back. To the right and left of the triple headed central figure are on either side four recumbent lions, turned away from the center but with their heads turned backwards. Each has an additional small head attached to the middle of its back and facing the tail. All are ornamented with granulated lines. Each is surrounded at the base by a gold wire which partly conceals its legs.

a sharp shadow and stand out in high relief. This produces a play of light and shade on the surface which gives the jewelry ornamented in this manner a charm which has never been equalled at any other period. To the naked eye the tiny globules appear to rest on the surface, and it is only with the aid of a high powered microscope that the technique can be studied. For a more complete discussion of the subject see my article in *Memoirs Am. Acad. in Rome*, I, 1917, pp. 63-85.

<sup>&</sup>lt;sup>1</sup> Bull. Inst., 1876, pp. 121 f.; An. Inst., 1876, p. 250; Mon. Inst., X, Pl. XXXI a, 1; N. S., 1876, pp. 86 (22), 284 f. (115 f.); Dennis, II, p. 500; Helbig, II, p. 264, No. 1577; Pinza, Pl. 17 (from a photograph, but reversed) and p. 453; Montelius, II, B, Pl. 370, 7; Chron., p. 100, Fig. 242.

<sup>&</sup>lt;sup>2</sup> In this and the other specimens mentioned later on in the catalogue the granulated lines are formed of minute grains of gold which are raised on little pedestals or ridges of solder, a process which causes them to cast

Soldered to the main plaque are 64 small rectangular plates of gold with their edges bent slightly upwards and inwards, thus forming little trays which serve as supports for an equal number of attached animals. 24 of these trays adjoin the central tube, 12 on either side, and 24 others are placed between these and the outer tongues. The remaining 16 adjoin the end tubes, 8 at either end. The trays on the outer edge of the plaque are  $0.7 \times 1.5$  cm. in size. The others are slightly smaller.

Adjoining the central tube and facing away from it are 12 seated lions on either side, soldered to the center of the trays. These are fully modelled, including the legs. On the 24 outer trays (12 on either side) are as many standing lions with their bodies and heads in the round, but with legs and tails indicated merely by attached bits of wire. The wire forming the legs passes through small holes in the plate on which they stand, and is evidently bent over and soldered beneath so as to hold them in place. On the 16 trays adjoining the end tubes are an equal number of standing horses also with legs and tails of plain bits of wire. They face away from the center so that their heads come over the tubes. (See Pl. 2, Fig. 1).

Surrounding the edge of the main plaque, and following the outline of the 16 projecting tongues is a continuous length of twisted wire. The four rectangular corner tongues are hidden by the end tubes. In the centers of the 28 tongues with rounded ends, 14 on either side, are attached seated lions with human heads on their backs facing their tails.

On the 30 spaces between the tongues (15 on either side of the plaque), are as many projecting loops of heavy wire, which project to a point somewhat beyond the ends of the tongues. The looped ends are slightly spread and flattened and serve as bases for 30 human (probably female) headed birds, ornamented with the usual granulated lines arranged to roughly suggest the wings at the sides and the strands of hair at the back of the head. A glance at the back of the plaque (Pl. 1, Fig. 2) shows that all of these loops are formed of one continuous piece of wire which is flattened wherever it is soldered to the plaque, and also at the looped ends where it serves as support for the birds.

Projecting from one of the short sides of the plaque, below the end tube, are two small female heads, with the hair indicated by granulated lines. On looking at the plaque from beneath one sees that they are Janus heads, with another face below. They are attached to the ends of two rows of small cylinders (19 in each row) which extend across the back of the plaque. In the spaces between the cylinders are the corroded traces of what were possibly silver pins. The Janus heads are now firmly attached, but may once have formed the heads of these two removable pins. The two rows are 2.7 cm. apart between centers.

According to Helbig 1 the plaque was found near the east end of the trench in

<sup>&</sup>lt;sup>1</sup> Bull. Inst., 1876, pp. 121-2. It was found at point a on the plan (Fig. 1, p. 13 above).

the floor of the tomb, and therefore probably formed part of some ornament placed near the head of the body. Its interest lies more in the wonderful granulated technique and in the richness of the material employed, than in the excellence of execution. The animals are poorly modelled, and the legs and tails of wire are totally inadequate to represent the actual forms. The figures are crowded together in stiff awkward rows and the plaque impresses one as a local product made to please some wealthy individual with a love for ostentatious display, but with little real appreciation. As in the case of other tomb ornaments there is little profit in discussing the construction, as the object may have been merely a grouping together of various known elements borrowed from simpler and more usable types, but itself never intended for actual service <sup>1</sup>.

2. Pl. 3, Figs. 1, 2. Serpentine fibula <sup>2</sup> of pure gold, solid and heavy. According to Helbig <sup>3</sup> this fibula was found near the east end of the trench in the floor of the tomb. (See Fig. 1, b). The total length af the fibula is 11.7 cm. The sheath is 8.3 cm. in length. The bow consists of the usual three curved members separated by two straight sections placed at right angles to the axis of the fibula. The curved section adjoining the sheath, and also the one in the center of the bow, are leech shaped, and at the point of their greatest diameter are bent upward (away from the pin) and end in sharp points <sup>4</sup>. These two sections are separated by a transverse dumb-bell shaped member terminating at either end in a perfectly spherical ball. The third curved member has an octagonal cross section. It is separated from the central leech shaped portion by a hollow, transversely placed cylinder. From its other end projects the pin of the fibula. The long, gently tapering sheath is without ornamentation.

The design of the fibula is complicated, but represents probably a survival from an earlier period when the curved members served as springs. In this instance the workman made the most of his opportunity, and the curved sections are most gracefully modelled.

2 B. Pl. 3, Figs. 3-5. Gold serpentine fibula <sup>5</sup>. Under this number is listed the well known and much discussed Manios fibula, although my own impression, based on its stiff lines and awkward transitions, is that it did not come from the Bernardini

A somewhat similar plaque is in the Barberini collection in the Museo di Villa Giulia. See Boll. d'Arte, 1909, pp. 165-6, and Fig. 1. Also reproduced by PINZA, Pl. 23.

<sup>&</sup>lt;sup>2</sup> An. Inst., 1876, p. 251; Bull. Inst., 1876, p. 122; Mon. Inst., X, Pl. XXXI a, 7 a, b; N. S., 1876, pp. 86 (22), 285 (116); Helbig, II, p. 264, No. 1578; Röm. Mitth., 1887, p. 38 (Helbig); Montelius, II, B, Pl. 370, 4 a, b; Chron., p. 100, Pl. 13, 2; Pinza, Pl. 19 a, from a good photograph, but reversed in the reproduction.

<sup>&</sup>lt;sup>3</sup> Bull. Inst., 1876, point b on plan, p. 120. (See Fig. 1, p. 13 above).

<sup>&</sup>lt;sup>4</sup> For a similarly shaped section see MARSHALL, Pl. XIX, No. 1378.

<sup>&</sup>lt;sup>5</sup> Helbig, II, p. 260, No. 1572; Röm. Mitth., 1887, pp. 37 ff.; p. 139; Montelius, II, B, Pl. 370, 3; Chron., p. 100, Fig. 241; Modestov, Introduction à l'histoire romaine, pp. 462 f.; Mon. Ant., XV, col. 646, Fig. 198 b (from a photograph).

Tomb 1, but is of a somewhat later date. It could in no case be considered among the genuine Bernardini objects on account of the uncertain and contradictory reports concerning its discovery. It is not mentioned in the original inventory, and was first made known to the public in three short articles in the Römische Mittbeilungen for 1887 2 where it is said 3 to have been purchased in Palestrina by a friend of Helbig in the year 1871, or five years before the discovery of the tomb. At some later period the museum authorities seem to have been convinced that it really formed part of the Bernardini treasure. It is now exhibited with the other objects, and is catalogued as belonging to the tomb in the last edition of Helbig's Fübrer, with the statement however that the reason for so doing is not known 4.

The total length of the fibula is 11 cm.; the sheath alone is 8 cm. in length. The bow resembles superficially that of No. 2, but the different members are heavy, without distinctive form, and run one into the other with no marked transitions. The graceful pointed ends of the two leech shaped portions of No. 2 have here become mere circular protuberances. The transition between sheath and bow, and bow and pin is marked by inartistic notches in the first instance, and by a bead ornament in the second.

The inscription is incised on the sheath. (See Pl. 3, Fig. 5 for enlarged reproduction). It reads from right to left: Manios: med: fhe: fhaked: Numasioi <sup>5</sup>. The letters are deeply cut, with such force that they are bordered by a raised ridge. As the fibula is probably later than the Bernardini Tomb, the inscription, even if genuine, is not as early as has been thought, and loses much of its supposed importance.

3. Pl. 4, Figs. 1, 2. Comb-shaped ornament <sup>6</sup> of gold, probably part of a clasp or belt fastener. It is solid in construction, and very heavy. The gold in this instance has an admixture of silver which has corroded and gives the object a silver tone.

The ornamented portion consists of a long and narrow rectangular plaque 15.5 cm. long and 2.3 cm. wide, from one edge of which projects a fringe-like portion formed of a single heavy gold 7 wire by bending it back and forth on a single plane and pressing the ensuing loops tightly together until the wires touch. One series of the looped ends is soldered to the back of the plaque on its upper edge, and is not visible. The visible portion projects above like the teeth of a comb, or a fringe. Ten loops remain on either

<sup>&</sup>lt;sup>1</sup> This too is the opinion expressed by PINZA, Mon. Ant., XV, cols. 649-50 (also col. 561).

<sup>&</sup>lt;sup>2</sup> Röm. Mitth., 1887, pp. 37-43, and p. 139.

<sup>&</sup>lt;sup>3</sup> *Ibid.*, p. 37.

<sup>&</sup>lt;sup>4</sup> Helbig, II, p. 260, No. 1572.

<sup>&</sup>lt;sup>5</sup> For discussions see *Röm. Mitth.*, 1887, pp. 40 ff; 139 f.; C. I. L., XIV, 4123; Dessau, II, 8561; DIEHL, p. VII.

<sup>&</sup>lt;sup>6</sup> Found near c, Fig. 1. Bull. Inst., 1876, p. 123; An. Inst., 1876, p. 249; Mon. Inst., X, Pl. XXXI, 2; N. S., 1876, pp. 86 (22), 285 (116); Helbig, II, p. 264, No. 1579; Montelius, II, B, Pl. 369, 1; Pinza, Pl. 18 c and c', from good photographs, but reversed in reproducing.

<sup>7</sup> Not silver, as stated in the Annali etc.

side of the plaque, but the wires forming them are broken, and probably the fringe was once continuous for the entire width.

The edges of the rectangular plaque are bent over on the back on the three sides not occupied by the fringe, and the entire ornament was attached to some other object, as is shown by the line of soldering still visible along the fringe on the under side. (See Pl. 4, Fig. 2). On the front of the rectangular plaque a complicated band of filigree, 4 cm. wide, extends around the edge. Commencing with the outer edge, it is made up of the following elements, all of gold: a single wire; two heavy wires twisted in opposite directions and lying side by side, thus giving the impression of a herring bone pattern; two straight and parallel finer wires; a filigree band formed of a continuous length of wire bent into a wave pattern; two parallel fine wires; two heavy wires, twisted as above; two parallel finer wires; and lastly a row of granulations.

The central portion of the plaque is ornamented by a row of birds and animals in relief. They are stamped through from the back of the plaque, and so sharply that all of the details are visible from behind. (See Pl. 4. Fig. 2). In the center are two winged lions with human heads, standing back to back, with tails erect. On either side of this group are three birds (six in all) all flying in the same direction, so that three are coming toward the lions and three are going away. At either end is a lion with legs thrown out behind, evidently bending every energy to run away. All of these figures are ornamented with granulated lines in single rows which follow their outlines and emphasize numerous details of their bodies. Between the figures are numerous V-shaped decorations formed of double lines of granulations. The granulated lines outlining the figures partially conceal the modelling, and it is only when the plaque is regarded from behind that the real excellence of the design is apparent. The artist was especially successful in depicting the flying birds.

It is difficult to determine the use which was made of this and similar objects with the fringe-like wire attachments. The problem will be discussed more in detail in the case of the following number.

4. Plate 5, Figs. 2, 3. Gold tube 'decorated with granulated lines, and resting on a strip of silver with a row of gold lions on either side. The present tarnished appearance is probably due to a large admixture of silver in the gold.

The tube is 19.5 cm. in length including the hemispherical caps which close it tightly at either end. The diameter is 1.3 cm. The tube is fastened to a velvet back-

<sup>&</sup>lt;sup>1</sup> Found near c Fig. 1 (See above, p. 13). Bull. Inst., 1876, pp. 122 f.; An. Inst., 1876, pp. 251; Mon. Inst., X, Pl. XXXI a, 4; N. S., 1876, pp. 86 (22), 285 (116); Dennis, II, p. 501; Helbig, II, pp. 264 f.,

No. 1580; Montelius, II, B, Pl. 370, 6; Chron., p. 100, Fig. 343; Pinza, Pl. 19 d, from a photograph, but reversed in reproducing.

ground and I was not permitted to take it off for closer inspection. From the analogy of the broken specimen No. 6, one sees that the outer casing is formed entirely of gold, and is fairly heavy. From the analogy of the specimen in the Barberini collection 1 it had, or possibly still has, within it an inner tube of bronze. The early descriptions 2 speak also of traces of a wooden core. Adjoining the present example (Pl. 5, Fig. 1) is a wand-shaped piece of wood tipped with bronze, 19 cm. long and 0.9 cm. in diameter. It is not mentioned in the inventory or in any description of the objects.

The gold tube has its caps and the cylindrical body for three fourths of its circumference covered with a complicated pattern of granulated lines in double rows. The under side of the tube is concealed by the lions at the sides, and received no ornamentation. Around the central portion, for a distance of 9 cm. are chevrons, 46 rows in all. At either end of this section is a band 4.5 cm. in length, with a meander pattern. At either end of the tube is a heavy wire which surrounds the base of the hemispherical end caps. These caps also have a granulated ornament formed of tho lines crossing at right angles at the center, with the spaces between filled with V-shaped ornaments gradually decreasing in size.

The tube rests on a thick strip of silver 18.3 cm. in length, and 2.4 cm. in width, bordered on the upper side by a twisted gold wire. On each of the long sides, between the twisted wire border and the central tube are 10 recumbent lions in the round, formed each of two corresponding sections, as on the large plaque (No. 1 above), and ornamented with granulated lines in much the same manner. They face away, five to the right, and five to the left, from a double central figure formed of the lions' heads and fore quarters, joined together back to back. This gives 22 figures in all, 11 on each side. They are ornamented with granulations in single lines. Each is surrounded at the base by a plain wire.

At either end of the silver strip is soldered a narrow piece of silver with a straight edge above and a curved edge below. Beneath the silver strip are the remains of four projecting wires with fragments of some object to which they were attached.

From a comparison with other examples of ornaments of this nature it is not difficult to determine the use to which it was put. The most complete specimen is probably that in the British Museum<sup>3</sup>. From this we see that it served as a fastener or clasp, possibly for a belt. The projecting wires and attached fragments on the under side of our No. 4 formed part of a framework which was furnished with elongated slits on each of the long sides. Into these slits were engaged the hooks formed of wire fringe similar to that described below under Nos. 12-15. The union between the cloth or leather of

<sup>2</sup> An. Inst., 1876, p. 251; N. S., 1876, p. 285 (116).

<sup>&</sup>lt;sup>1</sup> Boll. d'Arte, 1909, p. 166, Fig. 2.

<sup>&</sup>lt;sup>3</sup> Marshall, No. 1372, Pl. XV.

the belt and the wire hooks was effected by means of a strip of metal furnished with numerous perforations. This strip was soldered to the under side of the wire fringe, and then sewed, or fastened in some other manner, to the belt. When in use the hooks of the wire fringe were engaged in the long slits of the main framework.

Other specimens in a more or less fragmentary state are known 1. Some hold that these objects are too broad to serve as belt fasteners 2 and from the analogy of several terra cotta statuettes with the garment caught at the shoulder by an object roughly resembling them in form, consider them as made for a similar purpose. The terra cotta figures however are roughly modelled, so that an exact comparison of forms is impossible. Certainly the fasteners are not too broad for a belt to surround the waist. In fact there is much more space to accommodate them comfortably at that part of the body than on the shoulder. They may have been used in different locations and for different purposes 3.

It is difficult to understand why such a complicated series of layers in the tube was necessary, since the gold outer casing alone is strong enough to withstand a great deal of strain, and certainly it and the bronze inner tube together would be sufficient, without the wooden core. If parallel cases were only known one would be tempted to ascribe to the wooden wand some special significance, and regard the cylinder with the end caps as a case for its safe keeping.

5. Pl. 5, Fig. 4. Gold tube 4 with end caps, similar to No. 4, but having as base merely a silver strip (17.5 by 5 cm.) with six holes for attachment. The tube with the caps is 19.3 cm. in length and 1.6 cm. in diameter. The decoration is much the same as on No. 4. The meander bands are but 2.8 cm. long. Between them and the caps are two narrow bands, the first of chevrons, the second with a row of connected swasticas formed of a continuous double granulated line. According to the excavation account in the Notizie degli Scavi 5 the tube was pulled apart by a peasant at the time of its discovery to see if it contained treasure, and was found to be filled with an undetermined substance. It is evident from this chance remark that the excavation was not conducted with proper care.

lerii, may be seen in the Museo di Villa Giulia, in the curved gallery on the second floor, numbered XLVIII (Mon. Ant., IV, col. 477). In this specimen the framework is provided with a double row of holes into which were engaged the bronze hooks, of which a few remain.

In the Barberini Collection in the Museo di Villa Giulia, Della Seta in Boll. d'Arte, 1909, p. 166; from Falerii in the same museum, Karo in Studi e Mat., I, pp. 271 f., Figs. 41, 42; III, p. 147, Figs. 7, 7 a; from Cumae, Mon. Ant., XIII, cols. 234 ff., Figs. 11, 11 a, 12.

<sup>&</sup>lt;sup>2</sup> Marshall, p. 128; Pinza, pp. 200 ff., and Pl. 6. Excellent reproductions of the Cervetri statuette are given by Albizzati, *Atti Pontif. Accad.*, Ser. II, Vol. XIV, 1919, Pls. I, II.

<sup>3</sup> A somewhat different type, of bronze, from Fa-

<sup>&</sup>lt;sup>4</sup> Found near c, Fig. 1. Bull. Inst., 1876, pp. 122 f.; An. Inst., 1876, p. 251; N. S., 1876, pp. 86 (22), 285 (116); Helbig, II, p. 265.

<sup>&</sup>lt;sup>5</sup> N. S., 1876, p. 86 (22).

Between Nos. 5 and 6 (See Pl. 5) is a small fragment of wood, probably part of one of the wooden cores.

- 6. Pl. 5, Fig. 5. Gold tube 1 slightly smaller than Nos. 4 and 5. One of the caps is missing, and there is no silver strip below. The present length is 13.5 cm. The diameter is 1.5 cm. The decoration of the tube is similar to that of No. 4. The chevron band is 4.7 cm. in length. The meander bands are each 4.2 cm. long. The cap is decorated with a meander of granulated lines.
- 7 and 8. Pl. 2, Figs. 3-5. Two very small and shallow trays <sup>2</sup> of pure gold, 1.9 by 2.3 cm. in size. The sides are higher (3 mm.) in the middle than at the corners (2 mm.). The resulting curved outline makes it impossible that one of the trays could have served as a cover for the other. One of them is empty. The other is filled with a friable fine-grained paste which has a glassy appearance under the microscope, and which was evidently once colored to form an ornamental design. At present all that remains is a rectangular central section surrounded by five very narrow but perfectly regular rows, all of the same grayish tone. Pinza <sup>3</sup> suggests that the trays were used as bezels for rings, but no trace remains of soldering or other means of attaching, and the under side is perfectly smooth.
- 9. Pl. 4, Figs. 3, 4. Thin strip <sup>4</sup> of gold, 16.1 cm. long and 1.5 cm. broad, ornamented with a row of 14 human headed birds with outspread wings <sup>5</sup>, in relief. Surrounding the row of birds is a double row of raised dots, only remotely suggesting granulated work, but doubtless intended to serve that purpose. The edges of the strip are bent over toward the back, probably to attach it to some other object. A possible use to which it may have been put is suggested by the silver covered wooden cista from Palestrina in the Conservatori Museum <sup>6</sup>. On this cista the horizontal decorated bands are connected by vertical strips having somewhat similar human headed winged figures in relief, the main difference being that in our example the position of the birds shows that the strip was used in a horizontal sense.
- 10, 11. Pl. 6, Figs. 1-6. Two gold-plated button shaped disks 7 of silver, with a ring attached behind, possibly intended to represent in miniature round shields

<sup>3</sup> Pinza, pp. 380 f.

<sup>5</sup> WEICKER, Der Seelenvogel, p. 95.

<sup>&</sup>lt;sup>1</sup> Found near c, Fig. 1. Bull. Inst., 1876, pp. 122 f.; An. Inst., 1876, p. 251; N. S., 1876, pp. 86 (22), 285 (116); HELBIG, II, p. 265.

<sup>&</sup>lt;sup>2</sup> Pinza, pp. 380 f., and Pl. 20, l, n., reproduced from good photographs.

<sup>&</sup>lt;sup>4</sup> An. Inst., 1876, p. 251; Mon. Inst., X, Pl. XXXI a, 5; N. S., 1876, p. 285 (116); Helbig, II, p. 265, No.

<sup>1581;</sup> MONTELIUS, II, B, Pl. 368, 4; Chron., p. 100, Fig. 244.

<sup>6</sup> Mon. Ant., XV, cols. 563 ff., Figs. 165 a-c. (Pinza).

<sup>&</sup>lt;sup>7</sup> Not mentioned in the early reports. Reproduced from photographs by PINZA, Pl. 18, a, a'; b, b', but reversed. Briefly and inaccurately described by FERNIQUE, Étude sur Préneste, p. 173.

with a single grip. They have always been catalogued as buttons, doubtless because they resemble so closely modern buttons that no other attribution seemed needed. They are of very solid construction, formed each of a thick silver disk, convex above, concave below, 5.9 cm. in diameter. Projecting from the convex side is a circular knob with a flat top, 2 cm. in diameter. The entire convex surface and the knob is covered with a thick plate of gold, bent over to cover the edge of the disk which at this point is 15 mm. thick.

The knob of each disk has an incised pattern formed of two lines which cross at right angles. The four quadrants thus formed are filled with parallel lines alternating in direction in adjoining quadrants.

The main surface is ornamented in a technique which appears to have no parallel among objects of this period. The decoration consists of a circular band of human and animal figures with their feet toward the center, formed by cutting out from the gold plate the sections between the figures and filling the hollow spaces thus formed with some other material, whether silver or paste is now uncertain. A few details were then added by engraving fine lines on the gold 1. That there can be no doubt concerning the process employed is shown by the numerous abrasions and chippings at present visible on the surface of the disks. These all come in the filled-in spaces, while the gold surface remains everwhere intact. Strips of metal of this so-called "a giorno " technique are known from this period. A good example is seen in the ornamentation of the silver cista from Palestrina in the Conservatori Museum 2. The filling-in of the interstices is most unusual.

The details of the design are difficult to determine, but could doubtless be seen more clearly were careful cleaning permitted. On one of the disks (No. 11, Pl. 6, Fig. 1) nothing is visible but traces of one animal. On the other, (No. 10, Pl. 6, Figs. 2, 4) can be distinguished a row of dancing human figures alternating with animals and plants. The human figures either clasp their neighbors by the hand, or seize one of the animals by the head or the tail. Figures 2 and 4 on Plate 6 both show this disk, taken in different lights in an attempt to make visible as many of the details as possible. One of the animal figures can be quite easily determined, that of a lion probably, proceeding to the left, with apparently the upper half of a man protruding from its mouth. The lion's tail is curled upward to form a circle, and is clutched by a human figure on the right who holds the tail with the right hand. The lion is standing in front of a tree or plant, the top of which appears above its back. The figure holding the

<sup>&</sup>lt;sup>1</sup> Pinza (p. 381) states that these objects are of silver with the gold design painted on with a brush. The microscope however reveals clearly the thick gold

plate.

<sup>2</sup> Mon. Ant., XV, Figs. 165 a-c.

lion's tail clasps with its left hand the hand of a second figure. Behind their hands is another tree. The second figure in turn holds the hand of a third, apparently crouching and female. The crouching attitude is common among early representations of dancing. The third human figure seizes with the left hand the tail of a second animal proceeding to the right. This animal seems more like a horse than a lion. It is faced by still another animal, with a human figure between. Still further to the right is another human figure, and the head of the lion first described. The design at this point is especially difficult to determine.

On the under (concave) side of each disk (Pl. 6, Figs. 5, 6) is an oval ring of wire soldered flat on the surface. Projecting from the center of this is another ring of heavier wire, attached by one side to the surface of the disk. It is oval in shape, 2.1 cm. in height and 2.9 cm. long.

It seems quite probable that these objects were intended to represent shields in miniature. Circular shields with a single grip were in common use at the period of the tomb 1, and are represented on objects from the tomb itself, as, for example, bowl No. 23. Miniature examples are also known, both among early Greek remains 2 and from Italian sites 3. Certainly the present examples bear every resemblance to shields, with their convex front with projecting knob, and their concave back with the projecting handle in the center.

12-15. Pl. 7; Pl. 8, Figs. 1, 2. Numerous fragments of fringe of silver wire, formed in the same manner as the fringe of No. 3, by bending long pieces of wire back and forth on a single plane, and pressing the resulting loops tightly together so that their sides touch. The different sections vary in height. Some are left flat, and some have the loops at one end bent over to form a series of hooks. The fragments which remain are so broken and corroded that a reconstruction of any one of the fasteners would be impossible.

No. 12. Pl. 7, Figs. 1, 2. Consists of several fragments about 38 cm. in length. The height is 4.8 cm. One series of looped ends is bent over to form hooks. For the use to which this fringe was probably put, see above in the descriptions of tubes Nos. 4-6. Enough of No. 12 remains to have formed the hooked section for tube No. 5.

No. 13. Pl. 7, Figs. 3, 4. Consists of fragments bent over as in No. 12, 3.8 cm. in height and 23 cm. in length, or about enough to furnish fringe for tube No. 6.

Bull. Inst., 1876, p. 123; N. S., 1876, pp. 86 (22), 285 (116). Dennis (II, p. 501) calls them combs. They are reproduced from photographs in Pinza, Pls. 18-20. Pls. 18 and 19 are reversed, but 20 is right. The edges are in places blurred owing to the trimming away of the black background.

<sup>&</sup>lt;sup>1</sup> See the numerous examples given by Helbig, Jahresh. d. Oest. Arch. Inst., 1909, pp. 1 ff.

<sup>&</sup>lt;sup>2</sup> Ibid., Figs. 33-35.

<sup>&</sup>lt;sup>3</sup> N. S., 1902, p. 191, Note 1, with reference to the literature concerning these found at the Alban Lake in 1816-17. Cf. Bull. Pal. It., IX, p. 137, and Pl. VI, 3.

<sup>4</sup> Found near tubes Nos. 4-6 at point e, Fig. 1.

Between Nos. 13 and 14, as the fragments are arranged in the museum, are a few pieces of different dimensions, and also two longer loops, probably part of No. 15.

No. 14. Pl. 7, Fig. 5. A few fragments without hooked ends, 4.5 cm. in height. Present length about 9 cm.

No. 15. Pl. 8, Figs. 1, 2. Numerous fragments 2 without bent ends, 5.3 in height and 36 cm. in length. They possibly went with tube No. 5. A long rod is attached near the looped ends near one edge. To this rod were soldered a row of hooks, of which traces of eight remain. There also remains a fragment of a flat strip of silver attached to a prolongation of one of the hooks. This strip has a hole in the center.

16. Pl. 9, Figs. 1-3. Silver clasp <sup>3</sup>, usually called a fibula, covered with a thick gold plate, and ornamented with granulations. Both Nos. 16 and 17 are constructed on the same principle, and represent a type of which several examples exist <sup>4</sup>. They are formed of two similar and more or less complicated frameworks, connected when in use by a series of hooks in the center, and braces on the sides. The strictly functional portion consists of two similar transverse bars, one of which is furnished with projecting hooks, the other with eyes into which the hooks can engage. From each end of one of the transverse bars projects a pin which engages in a corresponding socket at the extremity of the other bar. These act as braces. The actual fastening is accomplished by means of the wire hooks and eyes which connect the centers of the transverse bars, and form a framework which also bears decorative elements. To the outer sides of the transverse bars (away from the hooks and eyes) are attached tapering tubes ending in human heads, and curving upward on one side, downward on the other. The clasps were found <sup>5</sup> near the head of the supposed burial (at b, Fig. 1), and on account of their curved form are thought to have been used to fasten the garment at the shoulder.

Of the two clasps in the Bernardini Tomb No. 16 is the smaller and less complicated. The greatest length of the portion now preserved is 8.3 cm.; the width is 2.9 cm. The transverse bars are 95 mm. in width, and consist of flat silver strips covered with gold. They are ornamented on the upper side with a meander pattern formed of granulated lines. The ends of one of the bars are bent over to surround and hold fast the gold pins which serve as braces at the sides. The ends of the other are bent over

<sup>1</sup> Shown on the right side of Fig. 4 of our Pl. 7.

<sup>&</sup>lt;sup>2</sup> Reproduced by PINZA, Pl. 18, (reversed) with part of the attached framework trimmed away.

<sup>&</sup>lt;sup>3</sup> Found at point b, Fig. 1 (See p. 13 above). Bull. Inst., 1876, p. 122; An. Inst., 1876, pp. 249 f.; 1879, pp. 15 f., and Pl. C, 9; Mon. Inst., X, Pl. XXXI, 7; N. S., 1876, p. 285 (116); Helbig, II, p. 265, No. 1582; Montelius, II, B, Pl. 370, 2; Chron., p. 101, Pl.

XLIV, 1; LANGBEHN, Flügelgestalten, p. 82; HELBIG, L'Épopée Homérique, pp. 352 f., Fig. 121.

<sup>&</sup>lt;sup>4</sup> MARSHALL, Nos. 1370, 1371, and Pl. XVII; J. H. S., 1911, pp. 263 f., Figs. 1, 2; Mon. Ant., XIII, col. 232, Fig. 10 (from Cumae); Helbig, II, p. 315 (in the Barberini Collection, Museo di Villa Giulia).

<sup>&</sup>lt;sup>5</sup> Bull. Inst., 1876, p. 122.

to form the sockets into which the pins engage when the clasp is in use. On these ends the granulated decoration extends around to the under side.

On each of the transverse bars rested three lion headed 1 sphinxes of gold, with human heads on their backs in place of the usual wing. They all faced the center. One of them is now missing. They are made in the usual manner of two corresponding plates of gold, beaten into a mould to receive their form and then soldered together. They are ornamented with granulations in single lines.

The wire framework by means of which the bars were fastened together, is of extremely simple construction, consisting merely of two long links of wire, attached at one end to small circular loops projecting from the center of each bar. At the other end the links terminate, one in a hook, and one in an eye. On each of these links rests a human headed bird, ornamented with granulations in the usual manner, and facing the center.

Projecting from the outer side of each of the transverse bars are three tapering tubes, one at each end and one in the center, bent upward on one side of the clasp, downward on the other. They are covered for their entire circumference with granulated chevrons and ended in small double-faced (Janus) female heads ornamented with granulated lines. All of the tubes are at present either broken or split open at the ends, so that all that remains of the heads is the broken half of one still in place, and one other which is entire, but detached.

17. Pl. 9, Figs. 4-6. Gold covered silver clasp <sup>2</sup> of the same type as No. 16, but larger and somewhat better preserved. Its greatest length is 9.3 cm.; its width 3.75 cm. In this example the two transverse bars are held in place between the two outer tapering tubes, which also serve as the sockets for the pins which form the braces on either side of the central framework of wire. The central tubes project from the centers of the bars. The three tubes at one end of the clasp curve upward, at the other end downward. They are 45 mm. in diameter at the base, and have a smooth surface (without granulations). They end in small female heads 7 mm. in height, which have their hair indicated by granulations in vertical parallel lines behind their heads, and in addition are ornamented with a double row of granulations around their necks, and another row at the junction with the tubes.

The two transverse bars are joined by a framework consisting of two series of links formed of very fine wire. At one end these links are bent over to form hooks, at the

<sup>&</sup>lt;sup>1</sup> J. H. S., 1911, p. 264 (Marshall). <sup>2</sup> Found at point b, Fig. 1 (See p. 13 above). Bull. Inst., 1876, p. 122; An. Inst., 1876, pp. 249 f.; 1879, pp. 15 ff.; Pl. C, 9; Mon. Inst., X, Pl. XXXI,

<sup>6;</sup> N. S., 1876, p. 285 (116); Montelius, II, B. Pl. 370, 1; Chron., p. 101, Pl. XLIV, 2; Helbig, II, p. 265, No. 1582; Helbig, L'Épopée Homérique, pp. 352 f., Fig. 122.

other they are spread to form eyes into which the hooks can engage. This forms a spring framework when joined. On its upper surface are soldered two other transverse bars which do not however touch the braces at the sides, but are merely suspended on the wire. All four of the bars (i. e. the two just described, and the two from which project the end tubes), have an undecorated surface, and serve as supports each for three seated, winged, human headed sphinxes, decorated with granulated lines. There are thus twelve of these sphinxes in all, six on either section of the clasp, facing the center. They are quite different in form from those on the gold cup No. 20, being somewhat more slender, and having outspread wings which curve upward to a point slightly higher than their heads.

18. Pl. 8, Figs. 3-14. Ten fragments of five silver animal fibulae with gold heads on their backs, and two small fragments, probably of a silver fibula, with filigree ornamentation. It is not possible to reintegrate an entire fibula from the few remaining pieces, but there is enough to make certain the form and dimensions of each part.

Each fibula had a long sheath (4 cm.) and a bow in the form of an animal, a type which was common in Italy, but was unknown in the East <sup>2</sup>. The length of a fibula if fitted together would be about 6 cm. The bow consists of two corresponding plates of silver, beaten into a mould to give them their form, and then soldered together. On the back was attached an additional head, formed in the same manner, but of gold. The body is most unusual in form. The fore part is modelled in the shape of a ram's head which appears to hold the end of the sheath in its mouth. Above its horns is another head and neck rising from the back. It is uncertain whether this head is of an animal or of a bird. It bears some resemblance to a sheep, but has a beak-like mouth. This head is turned backward. Its eyes, ears and neck are modelled in very low relief. It faces the back of the small head of gold which rises from a circular ring on the back of the large animal and is also turned backward facing the tail. This head resembles somewhat that of the main body, but does not have the curved beak-like mouth.

The tail is double. It is formed of two grooved strips of silver, with a twisted wire in the bottom of each groove. It is bent upward and over to form a large arc ending in a small circle within, which rests on the back.

The best preserved fragment, (Fig. 3) has remaining all of the main body, together with the gold head and one side of the double grooved tail. The fragment shown in Fig. 4 has a nearly complete body; that in Fig. 5 preserves the main body minus the

<sup>&</sup>lt;sup>1</sup> An. Inst., 1879, pp. 13 f.; Mon. Inst., XI, Pl. II, 11, (one fragment); Montelius, II, B, Pl. 367, 5; Chron., p. 101, Pl. LI, 20; Helbig, II, p. 265, No. 1583; Pinza, Pl. 20, from a photograph.

<sup>&</sup>lt;sup>2</sup> Cf. J. R. S., 1914, pp. 17-25, (Curtis). Helbig (loc. cit.) calls them "small animals of silver, possibly from an ornament similar to No. 1". Pinza on his plate (Pl. 20) labels them correctly.

upper head. Another fragment (Fig. 6) consists of the rear portion of a fourth body, and still another (Fig. 7) has a tail which could not belong to any of the other four, and therefore must have formed part of a fifth fibula. In addition there remain the following pieces: an additional gold head (Fig. 8); and fragments of three sheaths (Figs. 9-12), of which the pieces shown in Figs. 11 and 12 fit together.

The most striking feature of these fibulae consists of the second head modelled on the fore part of the body. On account of their long sheaths the fibulae seem of local origin, but to find a parallel for the additional head one must look to the East. On a Hittite relief from Sendshirli is represented, (to use the words of Meyer), " a winged lion, from the neck of which grows a human head " 2. In view of the fact that the lion's head has no neck, it might be more accurate to describe the figure as a human headed sphinx, with the fore-part of its body carved to represent a lion's head. When we bear in mind the other Hittite parallels noted elsewhere in this catalogue, this feature becomes of more than ordinary interest 3.

The other two silver fragments shown on Pl. 8 (Figs. 13, 14), belong probably to a fibula of another type. The first (Fig. 13) consists of a strip of filigree 2 cm. long and 4 mm. wide, formed of a band of overlapping loops of wire between parallel twisted wires. The other (Fig. 14) probably formed the end of the curved pin and the beginning of the first section of the bow of a serpentine fibula 4. It has adhering a fragment of a similar band to that shown in Fig. 13. The length of the fragment is 1.5 cm.

- 19. Pl. 8, Figs. 15-17. Three slender silver rods, flattened at one end and bent to form a right angle. Their lengths are as follows: of Fig. 15, 15.9 cm.; of Fig. 16, 18 cm.; of Fig. 17, 17.9 cm. A possible position where they could have been used would be to form part of the framework of clasps such as Nos. 4, 5 and 6. The length is approximately right. Their position would have been parallel to the silver strips beneath the tubes, and separated from them by a distance sufficient to admit the insertion of the hooks of the wire framework which formed the other portion of the clasps.
- 20. Pl. 10, Figs. 1, 2. Two handled skyphos <sup>5</sup> of pure gold, with two seated sphinxes on each handle <sup>6</sup>.

The skyphos is 7.9 cm. in height. The diameter of the top is 9 cm.; of the base

<sup>&</sup>lt;sup>1</sup> Ausgrabungen in Sendschirli, III, Pl. 43 (Cf. Pl. 38); and also shown in E. Meyer, Reich u. Kultur der Chetiter, Berlin, 1914, p. 101, Fig. 78.

<sup>&</sup>lt;sup>2</sup> MEYER, op. cit., p. 100.

<sup>&</sup>lt;sup>3</sup> See pp. 59 f.

<sup>&</sup>lt;sup>4</sup> Probably of the type shown in Montelius, II, B, Pl. 286, 7 a-c, from the Tomba del Guerriero, Corneto.

<sup>&</sup>lt;sup>5</sup> An. Inst., 1876, p. 251; Bull. Inst., 1876, p. 124; Mon. Inst., X, Pl. XXXI a, 6, 6 a, 6 b; N. S., 1876, pp. 114 (41), 288 (119); Montelius, II, B, Pl. 370, 5 a-c; Chron., p. 101, Pl. LIII, 7; Helbig, II, p. 265, No. 1584; Dennis, II, p. 501.

<sup>&</sup>lt;sup>6</sup> Found near the S. W. wall of the tomb (at point h, Fig. 1, on p. 13 above). See Bull. Inst., 1876, p. 124.

2.7 cm. The form is that of a proto-Corinthian skyphos. The handles project for a distance of 2 cm.

The sphinxes are placed two on each handle, on low bases which bring their feet to the level of the rim. They are made in the usual manner, of two corresponding plates of gold which were beaten into a mould to give them their form, and then soldered together and ornamented with granulations in single rows. They have large round human heads, and small wings which project very little from the body. The wings are ornamented with parallel rows of granulated lines which slant downward and backward, giving the impression of wings folded against the body. In this respect these sphinxes are very different from those on clasp No. 17, which have their wings open and curving upward.

A curious feature of the granulated decoration consists of the line which extends across the face of each of the sphinxes, following the line of the eyebrows, and also surrounds the nose. Still other granulated lines suggest the feet and tails, as can readily be seen on Pl. 10, Fig. 1.

This skyphos is the only example of a gold vase from tombs of the same period. An interesting parallel in bronze is found in a skyphos from the Argive Heraeum , with one sphinx with outspread wings on each handle.

- 21. Pl. 11. Numerous fragments of gold foil many of which have decoration in relief. The larger pieces are displayed in the museum on a sheet of plate glass. The balance, with many smaller fragments which were not photographed, are in a bowl which did not come from this tomb. Pl. 11 shows a selection of 54 of the fragments. Some of them were probably used to decorate objects of ivory or other material, and some may have formed part of wreaths. The two pieces in the upper left-hand corner of Pl. 11 are similar in shape, and have the same decoration of fine parallel ribs. The two fragments in the lower right hand corner both have a guilloche border, and a band of interlacing semi-circles within. Other fragments seem to have been applied to wings; others have scale patterns, rows of raised dots, etc.
- 22. Not photographed. Additional pieces of silver fringe, similar to Nos. 12-15. The few fragments, about 40 in number, are preserved in a flat glass saucer. Some are bent at one end (as in No. 13); others are straight (as in No. 15).
- 23. Pls. 12-18. Nearly spherical, round bottomed, silver bowl<sup>2</sup>, covered both inside and out with a thick sheet of gold, undecorated within, ornamented

the bowl, and developments of the bands; N. S., 1876, pp. 114 (41), 290 (121); Helbig, II, p. 266, No. 1585; Montelius, II, B, Pl. 367, 8 a-b, from drawings made from the *Monumenti* drawings, with some details either

<sup>&</sup>lt;sup>1</sup> Argive Heraeum, II, Pl. CXVIII, 2034.

<sup>&</sup>lt;sup>2</sup> Found near k, Fig. 1 (on p. 13 above). Bull. Inst., 1876, p. 129; An. Inst., 1876, pp. 252 ff.; Mon. Inst., X, Pl. XXXIII, with a fairly accurate drawing of

on all of the outside, including the round bottom, with incised decoration with some relief. At some period later than that of its original manufacture, it had six poorly modelled silver serpents covered with gold leaf nailed to the outside of the rim so that they cover part of the original decoration.

The bowl alone is 14 cm. in height; including the serpents 18.8 cm. Its inside diameter at the rim is 15 cm. A microscopic examination makes it clear that it is covered with a thick sheet of gold, both inside and out, so thick that it could receive a great deal of working either before or after being put in place, as shown by the incised lines, which would have cut through any mere wash of gold 1.

The decoration consists of four horizontal bands surrounding the bowl, and one circular section on the rounded bottom. The surface was first ruled for the guidance of the artist, and the extremely fine horizontal rulings are still visible. The human and animal figures are all outlined by deeply incised lines. Other details were then added by finely incised lines, or by raised dots struck from within the bowl. The bodies of the horses and the shields are embossed, and have a low rounded contour.

The bands of decoration are separated by an incised pattern formed of two rows of joined arcs, those in the upper row pointing down, and alternating with those in the lower row, which point up. The result resembles a twisted rope, and corresponds to the braided pattern on some of the bowls <sup>2</sup>. Only occasionally do the figures walk on this band. As a rule their feet come somewhat above.

The top band consists of a row of geese, all proceeding to the right. They are drawn with much spirit. They have the usual incised outlines, and in addition many details are brought out by means of raised lines and dots. The bodies however are not embossed as are those of the horses in the bands below. The number of geese represented is difficult to determine, due to the fact that the rosettes masking the bases of the serpent necks are nailed on at this level and hide all or part of several of them. As the geese are unevenly spaced in the row it is difficult to determine how many are thus concealed.

The next band has alternating warriors and horsemen, with one chariot and one hunting scene. The chariot <sup>3</sup> (Pl. 12) is proceeding to the right. It has a wheel with

changed or incorrectly added by the artist; the same in Chron., p. 101, Pl. LIII, 6 a-b; POULSEN, pp. 25 f., Fig. 15, reproducing the drawings of Montelius; both the text and the label of Fig. 15 of Poulsen incorrectly state that the circular section is from the inside of the bowl; ROSENBERG, Gesch. d. Goldschmiedekunst, Einführung, (Frankfurt, 1910), p. 130, Figs. 150, 151, from excellent photographs; Fig. 150 (about <sup>5</sup>/<sub>6</sub>, instead of full size as stated), is from about the same point of view as Pl. 12

of this volume; Fig. 151 is an enlargement of one section to nearly three times its size; it is reproduced on our Pl. 18, Fig. 2. The bowl is also mentioned in PERROT, III, p. 793, note 2.

<sup>1</sup> Rosenberg (loc. cit.) calls it a mercury gilding.

<sup>&</sup>lt;sup>2</sup> Poulsen, p. 14, note 2.

<sup>&</sup>lt;sup>3</sup> See STUDNICZKA, Der Rennwagen im syrisch-phönikischen Gebiet, Jahrb. 1907, p. 176, No. 26, and Fig. 26, (from Mon. Ant., X, Pl. XXXIII).

eight spokes, and carries two persons, one holding a spear, and one the reins and whip. Two horses are indicated by the number of legs, although but a single body is represented. The tail, as on all of the horses (also on Nos. 24 and 25), is long and feather-like.

To the right of the chariot are two warriors (See Pl. 13) each with two spears, and with round shields which cover the upper portion of their bodies. The shield of the first (after the chariot) has a circular depression in the center; that of the second has a fish incised in the center and a row of dots around the edge. Next is a palm tree, and then a rocky hill, indicated in the Assyrian manner by one deeply incised line enclosing a net-work of lines formed of raised dots. Up one side of this hill climbs a lion in pursuit of a horned animal which leaps from the top on the other side. In the air is a naturalistic bird with out-spread wings, one up and one down, and a fan-shaped tail. At the foot of the hill is another tree, not a palm. Next are represented two figures on horseback, the first with two spears, the second (See Pl. 14) unarmed. In front of these are two warriors, each with two spears and an undecorated circular shield. Then a horseback rider with two spears; above, a bird. Then two more warriors, similar to the last. Then a palm tree; a horseback rider with two spears (extreme right of Pl. 14); two warriors with undecorated shields (Pl. 15); a bird; a rider with two spears; a stylized tree 1; a warrior; a bird; a rider; two warriors with shields, on the first of which is a serpent, on the second (Pl. 12) a bird; and finally, another rider, immediately behind the above described chariot. All of the warriors in this frieze, and also the two figures in the chariot, are clad in a short sleeveless belted tunic. majority of the horseback riders seem nude above the waist. All have long hair falling to the shoulders.

The next band below has alternating warriors, horsemen and palm trees which repeat very closely the details of the frieze above. The only portion which shows much variation is shown on Pl. 18, Fig. 1. To the right is a chariot similar to the one described above. The driver in this case is apparently a woman. She has longer hair than her companion, and a totally different type of features. Only two reins are indicated, but that two horses were attached is shown by the eight legs, and also by the additional incised line behind the neck of the fully outlined horse. Behind the chariot are represented two warriors in combat. They are armed with heavy swords and round shields with a single handle <sup>2</sup>. They have scabbards at their sides and crested helmets with cheek guards on their heads. They are clad in the usual short sleeveless belted tunic.

The fourth band from the top surrounds the circular decorated portion on the bottom

<sup>&</sup>lt;sup>1</sup> See Myres, Handbook Cesnola Col. in Met. Mus., No. 4556, for similar trees with more naturalistic features.

<sup>&</sup>lt;sup>2</sup> Nos. 10 and 11 from this tomb (see above) seem to be miniature shields of this type.

of the bowl, and is shown on Pl. 16, and also on Pl. 17, Figs. 1-4. The decoration does not take the form of a continuous frieze, as was the case above, but consists of four different scenes, separated from each other by palm trees, and having each its own story to tell. This forms a pleasing departure from the usual monotonous rows of similar figures on the bowls of this period, and has as its only rival the hunt scene on bowl No. 24.

The first scene (Pl. 17, Fig. 1), commencing with the portion immediately above the lion of the central section, represents a hunter returning from his day's work, and driving before him two horses which have stopped to graze beneath two palm trees. He carries a lance in his right hand, and in his left the end of a stick which rests on his shoulder, and has hanging from the other end the body of some animal which he has killed. In the background are two plants with long stems bearing a flower which is half lotus and half lily.

To the right of this scene is a grape arbor (Pl. 17, Fig. 2), formed of vines loaded with ripe grapes which hang suspended between two palm trees. Below is a woman, clad in a tunic much longer than those worn by the men, engaged in picking the clusters. Before her is a man, clad only in a short waist cloth, and with clean shaven head, who is vigorously wielding a hoe.

The next scene, to the right of the arbor, (Pl. 17, Fig. 3), represents two lions which are attacking a bull, and are themselves attacked by a man on horseback. The horse is galloping to the left, away from the combat. The rider has turned around and is engaged in shooting arrows at the first of the two lions. Three arrows are depicted, one in the bow, one in the air in flight, and one which has already pierced the lion's neck. Above are two hawks with broad outspread wings, one extending forward and one down. In this scene the artist made a mistake in his first sketch and drew the entire body of the left hand lion, although it was intended to be in part concealed by the hind-quarters of the bull. He obviated the difficulty to some extent by blurring part of the line, but the result is inaccurate. His intention can be seen on one of the bowls from the Regolini-Galassi Tomb which has in the central medallion an exact replica of part of this scene with the drawing correctly rendered. The two bowls were evidently made in the same workshop, or else the scene was copied in both instances from the same original.

The final scene (Pl. 17, Fig. 4) represents a herdsman who defends his cattle against the attack of a lion. The herd consists of a cow, a calf and a bull <sup>2</sup>. To their

<sup>&</sup>lt;sup>1</sup> Museo Etrúsco, I, Pl. XXIII; PERROT, III, Fig. 544.

<sup>&</sup>lt;sup>2</sup> Also reproduced on Pl. 18, Fig. 2, from Ro-

SENBERG, op. cit., Fig. 151, an enlargement to about three times the actual size.

left is the herdsman with sword in hand, in close quarters with the lion which rears up before him. He is aided by his dog which springs up at the lion from below. Above the cattle are several birds in the air. The cow, being nearest the combat, gives evident signs of knowing of its existence. It stands with upraised head and open mouth, and may even be considered as wounded. The bird over the cow has both wings raised as if about to alight. None of the others are represented in this manner.

In the circular section on the bottom of the bowl (Pl. 16) is a nude man who has been thrown to the ground by a large lion. The man is in a crawling position, with his right leg doubled up, and his left arm outstretched, and is evidently attempting to escape, but the lion treads upon him and rests one paw on his upraised head. In front of the group is a lotus on a long stem. It is of the Phoenician type, and is really a combination of a lotus and a lily, with three small petals between two larger ones <sup>1</sup>. Another Phoenician feature is the lock of hair with curled up end on the flank of the lion, evidently suggested by the star-shaped isolated group of hairs which appears in the same location on Assyrian reliefs of a slightly earlier period, but is unknown in Egyptian art <sup>2</sup>.

Above the lion is the usual Horus hawk. The segment below the fallen man is filled with the typical Assyrian representation of a rocky hilly region, indicated by a network formed of wavy lines.

The bowl in its original form had no other decoration. At some later period an inferior artist added the heads and necks of six silver serpents which still project above the rim at the top. This he did by the simple process of nailing to the top of the bowl the clumsy rosettes (3 cm. in diam.) which mask their bases, thus covering in part the graceful frieze of geese. The serpents are poorly modelled, with incised eyes and mouths, and were once entirely covered with gold foil in an attempt to imitate the gold covering of the bowl below, but this was so badly done that much of it has since peeled off. It would seem reasonable to suppose that the bowl was imported from the East, and the serpents added by some local workman.

The inside of the bowl is nearly smooth. Probably the inner gold sheet was attached after the outer surface received its decoration, and thus hides the reversed details of the outside ornaments, which would otherwise appear as on the back of No. 25.

# 24. Pl. 19, Figs. 1, 2. Small silver bowl 3, covered with gold plate inside

<sup>1</sup> See Poulsen, p. 10.

<sup>&</sup>lt;sup>2</sup> See Poulsen, p. 11. This feature appears also on the lions on Pl. 17, Figs. 3 and 4.

<sup>&</sup>lt;sup>3</sup> An. Inst., 1879, p. 11; Bull. Inst., 1876, p. 129; Mon. Inst., XI, Pl. II, 8, 8 a; N. S., 1876, p. 115 (42);

Helbig, II, p. 260, No. 1573; Montelius, II, B, Pl. 367, 3; Chron., p. 101, Fig. 250; Poulsen, p. 26, Fig. 16. The illustrations in both Poulsen and Montelius reproduce the Monumenti drawing.

and out, and decorated within only. The height is 6 cm.; the diameter of the rim varies between 13 and 14 cm. as it is slightly bent. The sides are much thinner than in the case of the following number (No. 25). The decoration consists of a rosette of 25 petals in the bottom of the bowl. Above this are two rows of animals, separated from each other and from the rosette by rows of very small and closely adjoining semi-circles. The animals do not tread directly upon these rows. Below the rim is a double row of semi-circles with their arcs facing. The rosette petals and the bodies of the animals are outlined by incised lines and embossed. The details are brought out by means of incised lines, but no raised lines or dots were employed.

In the lower row are 7 horses proceeding to the right, with heads held high, and with long feather-like tails. Above each of them fly two naturalistic birds. Both horses and birds resemble closely those on No. 23.

In the upper row are 10 bulls, also proceeding to the right, and alternating with as many stylized trees. The trees have a pointed oval outline, with a short stem below. Within the oval are rows of adjoining semicircles. Two birds fly above each of the bulls.

The outside of the bowl is undecorated, but has an uneven surface which suggests roughly the inner design. This was caused by the inequalities of the silver surface which appeared much as the outside of No. 25 before the outer gold layer was applied.

The bowl was found at the W. side of the tomb <sup>1</sup>. It had within it the blue glass bowl (No. 60), and had touching its sides some of the iron fragments (No. 89), on one of which, according to the inventory, remains the imprint of one of the bulls. The iron fragment in question (Pl. 63, Fig. 16), although covered with rust, has a smooth surface at one point showing that it was long in contact with some other object, and doubtless when it was found, the outline of the bull could be distinguished. At the time of its discovery the bowl was so covered with rust that its decoration was barely visible <sup>2</sup>. It appears to have been cleaned with care. It is bent, and has several holes, but fortunately has not been restored.

25. Pls. 20, 21. Shallow silver bowl<sup>3</sup>, covered with gold on the inside, and ornamented with engraved bands of decoration, with some relief. Its diameter is 19 cm.; its height about 3.4 cm. The process of construction was probably as follows. In the first place the inside was covered with a sheet of gold which covers the entire decorated surface, including the serpent, and may extend to the edge of the rim. To decide this

<sup>&</sup>lt;sup>1</sup> Near point k on the plan Fig. 1, on p. 13 above. <sup>2</sup> Bull. Inst., 1876, p. 129.

<sup>&</sup>lt;sup>3</sup> Found near point k, Fig. 1 (p. 13 above). An. Inst., 1876, p. 248; Mon. Inst., X, Pl. XXXI, 1, 1 a; Bull. Inst., 1876, pp. 126 ff.; N. S., 1876, pp. 113 f. (40 f.), 288 ff. (119 ff.); Dennis, II, pp. 501 f.; Per-

ROT, III, pp. 758 ff., Fig. 543; Helbig, II, pp. 260 ff., No. 1574; Helbig, L'Épopée Homérique, Fig. 1 (from Perrot, III); Montelius, II, B, Pl. 368, 5; Poulsen, p. 25, and Fig. 14, from a good photograph; Curtis, Atti Pontif. Accad., Ser. II, Vol. XIV, 1919, pp. 114 ff., and Fig. 3 (same as Pl. 20, Fig. 1 in this catalogue).

point a closer examination than is at present permitted would be necessary. After this had been applied, the outlines of all of the figures and ornamental details were incised in the gold surface, and with such force that a raised line appeared on the silver surface outside. (See Pl. 21, Fig. 1). Next the portions of the design which were desired to be in relief were stamped from the outside of the bowl with some blunt rounded instrument which produced a raised rounded contour within. Such force was employed in this operation that in the depressions left on the outside of the bowl occur numerous deep cracks in the silver. (See Pl. 21, Fig. 1). Finally the minor details were added, either by means of a sharp pointed awl which when struck on the outside of the bowl produced raised points within, or else by means of punched dots and short incised lines on the inside, which appear on the outside of the bowl as raised points and lines. The inside only was intended to be seen, and the bowl as it stands is probably unfinished and lacks the casing of gold which was to cover the outside.

The decoration (See Pl. 20, Fig. 1) consists of a central circular medallion which is surrounded by two concentric friezes. The medallion is separated from the first frieze by a row of rounded bosses which are outlined by two rows of adjoining incised arcs which face each other on opposite sides of the bosses. A second similar row separated the two friezes.

Between the outer frieze and the rim is coiled a serpent, with head and tail slightly overlapping. The entire body of the serpent is in low relief, and is covered with a most carefully executed scale pattern formed of rows of points struck with a sharp pointed instrument. Under the microscope they are seen to consist of a series of deep round holes. To the naked eye they give the surface a most pleasing appearance, caused by the contrast between the bright gold color of the rounded serpent body, and the innumerable tiny dark-colored holes forming the scales. The head is especially well rendered (Pl. 21, Fig. 2) with its circular eye and nostril, and darting tongue.

In the central medallion a male figure, clad only in a short loin cloth, in Egyptian style, has overcome one of his enemies, a nude bearded man, and bound him in a half kneeling position to a stake at the left. He himself, brandishing a spear, advances to the right, and has seized by the arm a third individual, clad in the same manner as himself, who seeks to escape. At the feet of the central figure a dog with long ears and jackal-shaped head, has seized by the heel the fleeing enemy.

In the lower part of the medallion, separated from the figures just described by a straight line or chord on which they tread, is a crouching nude male figure, in the same attitude as that of the man beneath the lion on the bottom of bowl No. 23. He is seized by one heel by a dog similar to the one in the scene above. On both of the dogs the hairy body is indicated by short incised lines.

The first circular frieze has eight horses similar to those on No. 24, all prancing to the right. They seem plump and well fed, due to their well rounded bodies, have long feather-like tails, and hold their heads high. Two of them have collars around their necks. In the air over each and flying in the same direction, are two of the usual naturalistic birds with fan-shaped tails.

The outermost frieze is more complicated. The story which it tells has been made the subject of several articles 1 from which the following interpretation differs in several details.

Commencing at a point slightly to the right above the central medallion is seen an abbreviated representation of a walled town, with a stretch of wall flanked by two higher towers, all crowned with a battlement with pointed merlons. The stone work is indicated by incised horizontal lines to mark the courses, and short double vertical lines to indicate the joints, which alternate in the different rows.

In the frieze a story is evidently being told, with a sequence of scenes all referring to the same individuals, which we follow around to the left from the town. First a chariot 2 starts forth, clearly with two horses, and driven by a woman 3. An umbrella shades her and her male passenger, whom we shall term a king. A quiver hangs at the side of the car. The king wears an Assyrian cap and a heavy belted gown which is open in front below the belt to allow free movement to the legs. He carries an axe in his hand. A bird flies toward them in the air.

Immediately to the left is the second scene, with the same chariot and driver, but the king has descended and kneels in front with drawn bow. Over his head is a bird, and behind his outstretched foot is a tree. In front of him is a rocky hill from the top of which leaps a stag in his direction. The texture of the king's robe is here indicated by means of vertical striations. The tree, as elsewhere on this bowl, is represented in a naturalistic manner, with heavy lines for the trunk and branches, bordered on either side by rows of dots. A deeply incised line follows the contour of the hill. Within this line are rows of alternating, round, pointed bosses, outlined on the upper side by engraved adjoining semi-circles.

In the third scene the king has climbed the mountain. He stands behind the stag of the previous scene, facing the left, and has just shot an arrow at another representation

<sup>&</sup>lt;sup>1</sup> Bull. Inst., 1876, pp. 126 ff.; N. S., 1876, pp. 288 ff. (119 ff.); CLERMONT-GANNEAU, Études d'archéologie orientale, L'imaginerie phénicienne, Paris, 1880, (Journal asiatique, 1878, pp. 232 ff., 444 ff.); PERROT, III, pp. 758 ff.; A. J. A., 1887, pp. 322 ff. (Marquand); Myres, Handbook of the Cesnola Col., New York, 1914, pp. 463 f. My own interpretation also appears in the Atti Pontif. Accad., Ser. II, Vol. XIV, 1919, pp. 114 ff.

<sup>&</sup>lt;sup>2</sup> HELBIG, L'Épopée Homérique, p. 171, and Fig. 39, p. 177 (from the Monumenti drawing).

<sup>&</sup>lt;sup>3</sup> The other descriptions speak of a male driver, but the costume is the same as that worn by the women on bowl No. 23, a long belted tunic. The costume of the men is always shorter, with the exception of that of the king on this bowl, and that is of a different type.

of the same stag, which is depicted leaping from the opposite side of the hill, with a stream of blood pouring from its wound. The king stands with two arrows in one hand, and his relaxed bow in the other. The texture of his robe is in this instance indicated by a network of diagonal incised lines. Two birds fly toward the hill from the left.

In the following scene the driver has unharnessed the horses at the foot of the hill, and is engaged in feeding them from a portable manger 1. Here both of the heads of the horses are indicated, one behind the other, an unusual feature on these bowls. In the background are two naturalistic trees. Behind the horses, still more to the left, is a palm tree, and below it is the empty chariot with its pole resting on one of the trees behind the horses. To the left of the scene is still another tree upon which the king has suspended the carcass of the stag. He stands before it, knife in hand, and is engaged in dividing the body into two parts.

Immediately to the left the king appears again, seated on a stool, with his feet on a footstool. His umbrella has been removed from the car and placed over his head. In one hand he grasps his axe, in the other he holds a round object, probably a bowl. In front of him are two light folding stands 2 with slender legs. At the first glance they appear to be round and substantial altars, but that is merely on account of the rounded contour which the artist gave the space between the legs. On the first and smaller of these stands rests a large spherical bowl with a ladle attached to its cover, precisely similar to No. 30. (See below, and Pl. 26). It probably contains wine. Above is the sun disk with the crescent moon encircling its left side. The second stand bears a large dish with a broad flaring rim of the form of No. 68. (See below, and Pl. 47, Fig. 3). In the dish is a pile of some steaming substance, probably hot venison. The steam, or possibly the flame by which it is being roasted, is represented by oblique and converging slightly wavy lines. In the air overhead is the winged sun disk, presiding over the feast.

Immediately to the left of this scene is a rounded hillock, indicated in the same manner as the hill previously described. On its top are five trees and two animals; to the right a grazing stag; to the left a hare which appears somewhat alarmed. At the lower right hand corner of the hill, near the foot of the larger stand holding the dish of meat, is indicated the circular entrance to a cave. From the opening peers forth the ugly bearded head of a monster which stealthily stretches forth one hairy arm 3 until the claw-like hand reaches one leg of the stand on which is the meat.

63, 77. See also tripod No. 72 below, of a type probably derived from stands of this nature.

<sup>&</sup>lt;sup>1</sup> See Recueil de travaux relatifs à la philologie et l'archéologie, XXXIII, 1911, p. 109, Fig. 44 (wrongly attributed to bowl No. 26).

<sup>&</sup>lt;sup>2</sup> Probably these stands were of the folding, portable type seen on Assyrian reliefs of the 8th century. See LAYARD, Monuments of Niniveh, London, 1853, Pls.

<sup>&</sup>lt;sup>3</sup> Not recognized as an arm in previous descriptions, which term it the monster's tongue (Helbig, loc. cit.), or a stick with a curved end (Perrot etc.).

On the opposite side of the hill is again indicated the opening of the cave, but this time it is empty, as the hairy monster has come forth. He has evidently awaited a favorable opportunity to steal the banquet, and now bears in his upraised left hand the bowl of wine, with the ladle still attached to the handle. In his right hand is apparently a branch of a tree, represented in the same manner as the trees elsewhere on the bowl. At the monster's feet is a row of lines bordered by dots, which slant away from him. The intention may have been to represent shrubbery of some nature, although the lines are straight instead of waved, as in the case of the trees.

At this point the king has noticed the theft of his banquet and invokes the aid of his protecting deity. The horses are attached to the chariot, the king mounts with the driver, and we next see the divinity flying through the air toward the monster, bearing in its arms king and driver, horses, chariot and all. The divinity has broad outstretched wings, head of the Hathor type I with heavy locks of hair closely outlining the face and spread out on the shoulder, and bare outstretched arms which hold between the palms, in a space but seven milimeters wide, the beautifully engraved representation of the chariot, in which, in spite of the extremely small size, every detail can be clearly recognized, even to the umbrella over the king's head. The head of the divinity is the only one on the bowl represented in front view. All of the others are in profile 2.

The rest of the story is soon told. In the next scene the chariot has been placed on earth again. The driver whips up the horses and the king prepares to shoot with his bow, while the monster, almost under the horses' hoofs, tries in vain to escape. Over the horses are two birds flying in the same direction, to the left.

In the following scene the king has dismounted and places one foot on the kneeling monster. His right hand holds the axe, which he has raised aloft to give the final blow. Above in the air a sacred hawk flies to the right.

In the final scene the king has remounted his chariot and triumphantly returns to the town which he left earlier in the day. They are so near that the horses' right feet have already disappeared behind the tower wall.

It seems probable that this bowl, and also No. 26 with the Phoenician inscription, were made in the East and imported into Italy. The scene with the hunt on No. 25

who is able to overcome his enemy so easily in the following scenes has no need of being rescued merely because he is being stoned. Moreover the previous descriptions do not explain satisfactorily the fact that the divinity is bearing the chariot in the opposite direction from the other scenes and towards the monster. If it were the intention to save the king, the chariot would be headed away from the danger.

<sup>&</sup>lt;sup>1</sup> See Pettazzoni, Ausonia, 1909, p. 193 and Fig. 12; also Röm. Mitth., 1909, p. 329.

<sup>&</sup>lt;sup>2</sup> The usual interpretation of this scene is that the monster has waited for the king to pass the mouth of the cave and then picks up a large stone in his left hand, intending to attack the chariot from the rear, whereupon the divinity rescues the king. This interpretation is not reasonable, even aside from the fact that the object in the monster's hand is a bowl and not a stone. A king

occurs with very few variations on a silver bowl from Cyprus which is now in the Metropolitan Museum! The central medallion of the Cyprus bowl has practically the same scene as the central medallion on No. 26, so it is probable that all three bowls, Nos. 25 and 26, and the one from Cyprus, have a common origin, and were produced by workmen who were schooled in the same set of traditions.

The mixture of Egyptian and Assyrian motives in the same design would indicate that the bowls were made in some country such as Phoenicia or Cyprus which derived its artistic inspiration from several different sources <sup>2</sup>.

26. Pls. 22, 23. Shallow silver bowl<sup>3</sup>, engraved and embossed within, but not gilded. The diameter is 19 cm.; the height about 3.5 cm. The bowl is cracked in numerous places, and several pieces are missing. It has been placed on cotton wool in a smaller saucer and close examination is not permitted.

The technique employed differs somewhat from that of No. 25. The figures are outlined, not by sharply incised lines, but by means of a blunt instrument which produced a shallower and broader line. The raised portions are in lower relief, and are modelled with much more realism and skill. No use was made of raised lines and points struck from the outside of the bowl.

The decoration consists of a central medallion surrounded by a frieze containing four papyrus boats alternating with four papyrus thickets. Two rows of meaningless hieroglyphic signs separate the medallion from the frieze, and the frieze from the rim. They were engraved after first ruling the surface with fine lines to guide the hand of the artist (as in No. 23). The details of the decoration are copied more closely from Egyptian models than was the case on Nos. 23, 24 and 25.

In the central medallion the king strides forward to the right and threatens with upraised club his kneeling foe. On his head is a complicated crown with the solar disk, two feathers, two horns and two Uraeus serpents. Between his legs is a small lion. In his outstretched left hand the king holds his bow and arrows. With the same hand he clutches the hair of a group of kneeling captives, represented by one fully drawn figure in front, with many others behind indicated by projecting arms, legs and profiles on either side. The head of the first figure is turned toward the king. Its left arm is raised before its face in a supplicating attitude, and is followed by a row of the left arms of the figures behind. The right arm hangs down and the hand holds a knife.

<sup>&</sup>lt;sup>1</sup> For a discussion of the differences between the two bowls see Marquand, A. J. A., 1887, pp. 322 ff.; see also, Myres, Handbook of the Cesnola Collection, No. 4556, pp. 463 f.

<sup>&</sup>lt;sup>2</sup> See Poulsen, pp. 24 ff.

<sup>&</sup>lt;sup>3</sup> An. Inst., 1876, pp. 252; 257 ff.; 266 ff.; Mon. Inst., X, Pl. XXXII, 1; N. S., 1876, pp. 236 ff. (70 ff.),

and Pl. II, also p. 290 f. (121 f.); Gazette archéologique, 1877, p. 18, Pl. V; Dennis, II, p. 502; Helbig, II, pp. 262 f., No. 1575; Perrot, III, pp. 96 f., Fig. 36; Jahrb., 1898, p. 41; 1907, p. 175; 1910, p. 193; Poulsen, pp. 24 f.; Montelius, II, B, Pl. 369, 7 a, b; Chron., p. 101, Pl. LIV, 5 a, b; Helbig, L'Épopée Homérique, Fig. 2; Corpus Insc. Semit., I, No. 164, Pl. XXXVI.

On the right, facing the king, and also facing the captives, some of whom are turned in its direction, is a divinity with the head missing, except for a trace of what may have been the end of a hawk's beak. On its head was a large solar disk, with possibly the usual encircling serpent, although the remaining traces are very faint. In the lowered left hand is the symbol of life; in the outstretched right hand a flower or palm.

Behind the king is another male figure with a spear in its right hand, and carrying a dead body thrown backward over its right shoulder. With its left hand it holds by the hair a captive who has been forced to his knees. In the same hand is the handle of a large nearly round object shaped lie a palm-leaf fan, ornamented with a net-work of engraved lines. On Egyptian scenes of a similar nature the king is followed by an attendant with some emblem in his hand 1.

Scattered in the field are three cartouches and several symbols; an eye, a bull, a feather and a cat.

Above the king is a large hawk flying to the right, with a long feather in its claw. Above its outspread left wing is engraved in exceedingly small letters a Phoenician inscription reading Eshmunyaad ben Ashto<sup>2</sup>.

Below the main group of the medallion is a row of meaningless hieroglyphics. In the narrow segment below this row is a crouching male figure with its left leg doubled up and its left arm outstretched, evidently striving to escape.

In the outer frieze are four papyrus thickets alternating with four papyrus boats. The thickets are formed of a graceful fan-shaped grouping of papyrus blossoms on long stems, with alternating buds on shorter stems within. In the center of each thicket stands Isis suckling the infant Horus.

The boats have engraved horizontal lines to indicate the papyrus stems from which

<sup>1</sup> See Maspero, The Struggle of the Nations, pp. 581 f.; for other representations of the same scene see Perrot, III, Fig. 546; Myres, Handbook of the Cesnola Col., Nos. 4554, 4556; Poulsen, p. 28, Fig. 20; Mélanges Perrot, p. 255 (Pierre Paris).

<sup>2</sup> For an enlargement see Pl. 22, Fig. 2. I am indebted to Professor George A. Barton of Bryn Mawr College for the following interesting note on the subject. 

The inscription has been long known and is published in the Corpus Inscriptionum Semiticarum, I, No. 164, pp. 214 ff. Fabiani read the inscription Eshmunyair son of Ashto, but the editors of the Corpus, Eshmunyaad son of Ashto. In Phoenician characters r and d are often indistinguishable. Palaeographically either reading is defensible. The writing is well done. Apparently it was written by one well acquainted with Phoenician characters. There is but one letter that is palaeographically significant. That is the letter Yodh (y). It is made after the Phoenician manner, not as it was made by

Hebrews, Moabites, Aramaeans etc. Further it corresponds rather more nearly to the Phoenician than to the Punic form of the letter. More specifically, the two occurrences of the letter known to me that most nearly resemble the form of it on the bowl are respectively in the Eshmunazer inscription from Sidon, and the inscription of Cleon from Sardinia (C. I. S., I, 143). The former is from the fifth or fourth century B. C., the latter of uncertain date. The form of this letter indicates that the writer was a Phoenician rather than a Carthaginian. The name Eshmunyaad is not preceded by the preposition which denotes possession. It is probably, therefore, not the name of the owner of the bowl. The editors of the Corpus think that it is the name of a dead man who is mythologically represented by the sparrow hawk-a view that hardly commends itself. Possibly it is the name of the maker, though usually Phoenician workmen in signing their work added a word such as " maker ". or "engraver"".

they are formed, and groups of four vertical lines to indicate binding material. At either end they terminate in a broad papyrus umbel above a tightly bound neck. Of the boat below the king only a few traces remain, and a section of the one to the left is also missing.

In the center of the boat above the king (Pl. 23, Fig. 1) stands Osiris in tight mummy-like wrappings. He wears the crown of Upper Egypt with a feather on either side. His hands are pressed against his breasts, and in each he holds a whip. This figure is faced on each side by a standing hawk-headed divinity with a head-dress formed of the large solar disk encircled by the Uraeus serpent, and with both hands outstretched. Back of the hands, but apparently not held by them, is a staff with curved top from which depend a row of the symbols of life!

In the center of the boat to the right of the central medallion (Pl. 23, Fig. 2) is a lotus flower, and above this a large winged beetle with the head of a hawk and upraised human arms which support the sun disk. At either end of the boat, on a support formed of a lotus flower, with a large bud on each side, sits Harpocrates with finger in mouth and holding a whip in the right hand. Back of each representation of Harpocrates is a hawk in an upright position stretching forth both wings in a protecting manner.

The boat below the central medallion is nearly all missing. To the left one sees a female figure offering a double image of Ma, goddess of Truth and Justice, to a central figure which has now disappeared with the exception of the upper part of its double crown. On the right are a few traces of what has probably a similar figure to the one on the left.

The boat to the left of the central medallion has in its center another winged beetle wearing a triple crown. Its face is much battered, and pieces are missing. To the left a kneeling male figure wearing the crown of Upper and Lower Egypt holds out a large feather. Behind it is a hawk similar to the one on the opposite side of the bowl. On the missing fragment to the right was probably a kneeling figure facing to the left.

27. Pl. 24. Dagger <sup>2</sup> of bronze <sup>3</sup> with amber handle surrounded by a gold band ornamented with granulations. Sheath of silver <sup>4</sup>. The dagger is 37.5 cm. long from the point to the end of the hilt. The blade is 3.8 cm. broad at the widest portion,

PINZA, Pl. 21, from a photograph, but reversed in the reproduction.

<sup>&</sup>lt;sup>1</sup> This is a corruption of the ordinary Egyptian representation in which these symbols are shown alternating with the symbol of purity, and being poured from a vase. See WILKINSON, *Manners and Customs*, London, 1878, Vol. III, Fig. 530, p. 133; Pl. LXII, p. 362.

<sup>&</sup>lt;sup>2</sup> An. Inst., 1876, p. 249; Bull. Inst., 1876, p. 123; Mon. Inst., X, Pl. XXXI, 4, 4 a; Montelius, II, B, Pl. 369 a-c; Chron., p. 103, Pl. XLI, 1 a, b; Bull. Pal. It., IX, p. 101, Pl. III, 11 (Pigorini); Helbic, II, p. 266, No. 1586; Zeitsch. f. Ethnologie, 1890, p. 19, Fig. 35;

<sup>&</sup>lt;sup>3</sup> Called "silver " in the inventory. It is more reasonable to suppose that it is of bronze, and that the present color is due to a deposit of silver acquired through long contact with the sheath. A chemical analysis was not permitted.

<sup>&</sup>lt;sup>4</sup> Found at point d on the plan (Fig. 1, p. 13 above). Helbig (Bull. Inst., 1876, p. 123) calls the blade of iron, an error copied by nearly all subsequent publications.

and 26 cm. long. The blade and the core of the hilt are formed of one continuous strip of metal in the usual early manner. The blade is ornamented on either side by five raised parallel ridges which merge together where it commences to narrow, and continue as a single ridge to the point.

The flat core of the hilt is surrounded by a raised edge on both sides. Between these raised portions were socketed the amber grips. The shape can be best seen on Pl. 24, Figs. 3-5, where may be noted the two re-entrant curves with a ridge between, and the broader projection with curved end at the pommel.

The raised edges of the hilt were masked by a strip of gold which follows their outline entirely around the hilt, and is held in place by being bent over the edge on both sides. Surrounding the edge of this applied gold strip are two gold wires twisted in opposite directions so that when placed together the diagonal lines form a herring bone pattern. Adjoining these wires is a continuous row of granulations on which rest a row of granulated triangles pointing toward the center. Their bases touch and their apices meet the apices of the opposite row except on the section surrounding the pommel, where they are separated by a ridge.

The curved amber grips were fitted between the raised edges of the hilt, and were given additional support by means of pins projecting on either side from the flat core. The pieces which adjoined the blade are missing. Between this section and the pommel there still remains on either side a long rounded piece of amber with a ridge in the center. At the pommel two long projecting pins held two other large rounded pieces of amber, of which one remains nearly intact.

Additional security was given by means of wrappings around the hilt of gold wire, of which two sections are still preserved.

The sheath (Pl. 24, Figs. 1, 2) is 4.4 cm. broad at the widest portion, and ends at the point in a disk 3.8 cm. in diameter. Near the point is a smaller disk 2.8 cm. in diameter. The sheath has a raised edge. On one side is a triple raised ridge in the center ending in a single ridge at the point. On the opposite side it is ornamented with raised parallel ridges for its whole width, running together as the sheath narrows. The treatment of the point can be best seen on Pl. 24, Figs. 1, 2.

28. Pl. 25. Iron dagger 2 in silver sheath with handle of ivory and amber, and ornamented at end of sheath with a golden flower with granulations.

Montelius, II, B, Pl. 369, 8; Pl. 367, 2 (flower); Chron., p. 103, Pl. XLI, 3; Helbig, II, pp. 266 f., No. 1587; Mon. Ant., XIII, col. 256; Pinza, Pl. 22 (from good photograph) and pp. 454 ff., Figs. 387-392; p. 430, Fig. 362.

<sup>&</sup>lt;sup>1</sup> Cf. Bull. Pal. It., IX, Pl. III; PINZA, p. 430; MONTELIUS, II, B, Pl. 348, 4 a, b, (a dagger from Veii of practically the same shape).

<sup>&</sup>lt;sup>2</sup> An. Inst., 1876, p. 249; p. 251 (flower only); Bull. Inst., 1876, p. 123; Mon. Inst., X, Pl. XXXI, 5 a, b; XXXI a, 5 (flower); N. S., 1876, p. 115 (42);

The dagger as exhibited (Pl. 25, Fig. 1) consists of the sheath, with the iron blade so rusted within that it cannot be removed, and of a handle made up of several fragments which possibly do not belong together. The total length as at present arranged is 60.5 cm.; the length of the sheath alone is 34.3 cm. The width of the sheath at the widest portion is 5.6 cm.

Of the fragments forming the handle the one adjoining the sheath seems certainly to have belonged to the dagger. It consists of a long piece of ivory with an iron core. At the sheath end it was surrounded by a band of animals, apparently winged, in low relief, of which a few traces are still visible. The balance of the handle consists of alternating disks of amber and pieces of ivory, all with an iron core. At the end is a loop of silver wire 1.

The sheath ends in a flower 2.2 cm. long with a silver core, and with gold leaves which are ornamented with granulations. In the center are four small petals of gold bent up in cup shape as if they once held a setting. They each have a row of granulations around the edge and a V-shaped granulated ornament in the center. At their bases are attached five larger gold leaves which are bent backwards so that their tops almost touch the base of the ornament. They are decorated with granulations in double rows. One row extends along the center of each leaf and on either side of this is a zigzag line with small granulated triangles interspersed.

The sheath is covered on each side by a thin plate of silver ornamented with embossed relief. These plates are held in place by a somewhat thicker strip of silver which forms the rim and is bent over on each side to hold the relief strips in place. The reliefs are so placed that the same side comes uppermost on each side of the sheath, in such a manner that a person who had seen one side and was desirous of seeing the other, could not turn the dagger over in his hand, but would have to reverse it so that it pointed in the opposite direction.

Side a. (Pl. 25, Fig. 2). Has a guilloche above and below, and two rows of animals (with one male figure) in low relief, with a narrow raised feather-bone ornament between, on which some of the animals in the upper row tread. In the lower row they all tread on the guilloche. In the upper row are represented, commencing at the left, (the handle side), first a nude kneeling hunter who aims with bow and arrow at the row of animals which follow. These are in order, a stag, grazing to rt.; a half kneeling stag to rt. with head turned backward, possibly depicted as wounded; a stag grazing to rt.; a feline animal, which for convenience, as elsewhere, will be termed a lion, to l., with open mouth and up-raised tail; a bull with lowered head to l.; two more lions to l.,

Pinza (p. 430) suggests that the pommel was formed by the silver knob No. 29. This is possible,

but there is no direct evidence.

the second of which comes in the narrowing portion and is smaller. In the lower row come, first a lion to rt; a half-kneeling bull to rt.; a bull with lowered head to rt., attacking a lion which faces it and is attacked from the rear by another bull to l.; two animals, possibly rams, proceeding to rt.; a grazing animal to rt., possibly a deer, but partially destroyed; a running animal to rt.; and finally in the narrowing portion another animal difficult to distinguish on account of the rust.

Side b. (Pl. 25, Fig. 3). Has no guilloche, and the animals, as they occupy all of the available space, are larger than on side a. Here the narrow end is at the left and contains a lion with open mouth pursuing a centaur with human fore legs and holding a club in his up-raised right hand. Both proceed to rt. Then the scene changes to two rows, with a gradually broadening ornamental band between. In the upper row is first represented a nude man with knife in hand. He has been thrown to the ground and lies on his back threatening with the upraised knife a lion which approaches him from the rt. Next are two bulls facing with lowered heads, and then two rams (or a ram and a sheep) facing each other on opposite sides of a large Cypriote palmette. The first of these animals as hits fleece indicated by incised diagonal lines. At the end of the row is a partially destroyed animal to l., possibly a sheep.

In the lower row, at the feet of the centaur, is a small animal, possibly a dog. Next are represented three stags to l., the first of which is half kneeling as if wounded; the other two are grazing. Following is a bull, to l., and finally two grazing animals to l., apparently horses, with between them a kneeling herdsman with two clubs, one held over his l. shoulder, and one in his outstretched rt. hand.

29. Pl. 28, Fig. 4. Heavy silver circular knob 1, possibly a sword pommel, ornamented on the upper side with four serpents' heads projecting from a single neck. The diameter of the knob is 2.7 cm. The height as it stands is 4.1 cm., but much rust is attached to the top of the heads, and if cleaned it would be lower. The diameter between the ends of the serpents' noses is 3 cm. The heads are quite similar to those on bowl No. 23.

The upper portion of the circular base has a smooth surface, but below it is roughened, giving the impression that it was embedded in some other object and not intended to be seen except from above. At four opposite points on the sides are traces of four metal pegs or attached wires, and in the center of the flat bottom is the trace of another peg<sup>2</sup>.

the pommel of dagger No. 28 and publishes (Fig. 362) an unconvincing sketch to show how it was attached.

<sup>&</sup>lt;sup>1</sup> Not mentioned in the Annali or Bullettino or in Helbig.

<sup>&</sup>lt;sup>2</sup> Pinza (p. 430) considers the knob to have formed

30. Pl. 26. Deep silver bowl, almost spherical, with lid perforated to serve as a strainer, and with attached ladle or simpulum. The bowl is without decoration. It is somewhat battered and the surface is corroded in places. The height is about 15.3 cm.; the diameter of the opening is from 9.7 to 10 cm.

The lid (Pl. 26, Fig. 2) is circular in shape, 11.8 cm. in diameter, and has projecting from one side a hook which is modelled at the end to roughly resemble the head of a bird with a broad beak. In the center of the cover is a circular depression 5 cm. broad with the bottom perforated to serve as a strainer.

The ladle (Pl. 26, Fig. 3) is 15.8 cm. long. The handle ends in a hook similar to that on the cover of the bowl and was doubtless intended to engage in it when not in use. The bowl of the ladle is hemispherical in form, 3 cm. in height and 5.5 cm. broad.

A similar bowl with the ladle attached is seen on bowl No. 25, on the stand in front of the seated king, and again in the following scene, in the upraised left hand of the fleeing monster.

31. Pl. 27, Figs. 1, 2. Bronze handle <sup>2</sup> covered with ornamented strips of silver. The handle has a heavy bronze core. Its greatest height is 12.3 cm. The bottom section is rectangular with a slightly convex surface, and is 9 cm. broad. Within are traces of the wooded rim to which it was attached. Above is a curved section forming the handle proper, with a raised and rounded vertical ridge on each side. The handle is 6 cm. in width. The fragmentary upper section is flat.

The silver ornamentation consists of several thin strips with decoration in relief. One of these covers the entire inner surface of the curved portion of the handle. In the center it is ornamented with a row of nine lions with upraised tails and open mouths, modelled in the heavy clumsy manner of shield No. 82 from this tomb, or the gold "breast plate" of the Regolini-Galassi Tomb 3. Surrounding these lions is a double row of raised points on which walk 25 somewhat smaller animals, all apparently horses with the exception of one lion with head turned back, at one of the ends. There are nine of these animals over the central row, ten below it and three at each end. Between the row of 25 animals and the edge of the strip is a guilloche on all four sides.

A second silver strip is attached to the outer side of the curved section. It covers its entire surface, is bent over and around the ridges at the sides, and covers the outer

<sup>&</sup>lt;sup>1</sup> An. Inst., 1879, p. 15, Pl. C, 3 (bowl and lid); An. Inst., 1876, p. 252 and Mon. Inst., Pl. XXXII, 3 (ladle); Bull. Inst., 1876, p. 129; Montelius, II, B, Pl. 366, 12 and Chron., p. 101, Pl. LIII, 1 (ladle). Found near the west side of the tomb. See Bull. Inst., 1876, p. 129.

<sup>&</sup>lt;sup>2</sup> An. Inst., 1879, pp. 11 f.; Mon. Inst., XI, Pl. II, 9, 9 b; N. S., 1876, p. 115 (42); Karo, De arte vascul. ant., p. 4; Montelius, II, B, Pl. 367, 1 a, b, c; Chron., p. 103; Poulsen, pp. 123 f., Figs. 132-3; Helbig, II, p. 263, No. 1576.

<sup>&</sup>lt;sup>3</sup> PINZA, Pls. XVI, XVII.

edge of the strip on the inner side. The decoration of this strip is much corroded, but one can still distinguish on the lower portion a group of heraldically opposed horses with a palmette between '. Above is an animal standing to rt. on its hind legs, and apparently attached with swords by two men who face it, one on each side. Behind each man is a tall stem ending in a floral ornament. At the top of the curved section is a similar group to the one just described, but the other side up. Here the animal faces to the left, and there are no floral ornaments behind the men. At each of the four corners a small tab of silver is bent around the edge and nailed fast.

Another silver strip is attached to the outside of the rectangular lower section of the handle. It was bent around the edges, and was given additional security by means of small nails which were driven through from the outside into the wooden object to which the handle was attached. Some of the nails and fragments of the wood still remain. The ornamentation of this strip consists of the figure of a woman faced by two animals, apparently winged, standing on their hind legs. Behind each animal is a floral ornament. The upper portion of this section is so corroded that the details cannot be determined.

The broken section above the curved portion of the handle was also covered with a silver strip. On it is represented a woman who grasps the backs of two animals which stand on their hind legs facing away from her. This section was originally much wider. Beyond the animals on each side is still visible the leg of another figure. The one on the right shows in the *Monumenti* drawing, but that on the left was omitted by the artist. It can be seen on our Pl. 27, Fig. 2.

The handle was probably attached to a wooden vase with a sharply retreating rim, as on situla No. 79. The silver strip on the inside of the curved section was evidently made for the place and intended to be seen. It is not a piece of waste material used again merely as a covering.

32. Pl. 27, Fig. 3. Round silver bowl <sup>2</sup>, 8.2 cm. in height. The top is much bent. One side is crushed in and has still adhering two much oxidized iron tubes with traces of a wooden core within, possibly lance points. The bowl has a severely simple outline. Its only decoration consists of a row of dotted incised circles just below the rim, and beneath this a scale pattern formed of three rows of alternating incised semi-circles. This type of bowl occurs in other tombs of the same period <sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> See Poulsen, pp. 123 f.; and cf. the horses on stand No. 81. See also Poulsen, Zur Zeitbestimmung d. Enkomifunde, Jahrb., 1911, p. 239.

<sup>&</sup>lt;sup>2</sup> This and the following silver objects Nos. 33-36, are not mentioned in the early reports.

<sup>&</sup>lt;sup>3</sup> See Montelius, II, B, Pl. 339, 1 (Regolini-Galassi); *Mon. Ant.*, XV, col. 567, Fig. 167, incorrectly labelled 168 (from Palestrina); FALCHI, Pls. XIV, 13; XVI, 3 (from Vetulonia).

- 33. Pl. 29, Fig. 1. Silver bowl, similar to No. 32, but slightly shallower. One side is crushed in. The height is 7.3 cm.; the approximate diameter of the top is 13 cm. The decoration consists of a scale pattern of three rows, as in No. 32, but much more carelessly incised, and the row of dotted circles above is lacking.
- 34, 35. Pl. 28, Fig. 1, 2. Two silver plates, badly crushed. No. 35 has several pieces missing. The longest diameter of No. 34 is 18.9, the shortest 18.7 cm. Of No. 35 the longest diameter is 18.7, the shortest 15.4 cm. The only ornament consists of a circular boss in the center. The rim has much the same profile as that of bowl No. 25.
- 36. Pl. 29, Figs. 2, 3. Silver oinochoe 2 with gold covered palmette on the side to mask the junction of the handle. It is badly crushed, and the base and other sections are missing. The height as it stands is 21 cm. The original form of the vase can be determined from better preserved specimens in other tombs of the same period 3.

The body of the vase is formed of two sections of which the lower is hemispherical in shape and had originally a slight ridge at the narrow base. The upper portion tapers rapidly to the very narrow trilobate mouth. The union of the two sections forms a ridge which surrounds the center of the vase.

The handle is at present separate, but doubtless belongs to this vase. It consists of two heavy parallel joined tubes, each 85 mm. in diameter, bent at the top to meet the rim, and terminating at the base in a horizontally ribbed strip which is covered with gold. This ribbed section joined the vase just below the horizontal ridge. Below the juncture, and still attached to the vase, is a large fan-shaped palmette with its ornamentation in relief, formed either entirely of gold, or else of silver covered with a thick sheet of gold. (Pl. 29, Fig. 3). It has at the top two broad volutes pointing downward, and springing from a row of lotus petals. In the center is a small palmette in high relief. The lines forming its petals radiate in lower relief to the edge of the large palmette, where they terminate each in an ornament of similar shape to the one in the center 4.

# 37. Pl. 30, Fig. 1. Silver skyphos with widely flaring sides, much broken and

<sup>1</sup> The brass numbers belonging to these bowls are hopelessly mixed in the museum cases. This bowl is labelled in pencil on the side No. 39, but inasmuch as the inventory gives the height as well as the diameter (13 cm.) for No. 33, and the diameter (12 cm.) only for No. 39, it seems best to call the crushed bowl, of which the height cannot be determined, No. 39, and to label this example No. 33, especially since its diameter is slightly greater than that of the other.

<sup>&</sup>lt;sup>2</sup> Mon. Ant., XIII, cols. 241 f. (Pellegrini); Röm. Mitth., 1907, p. 79, note 1 (Pinza). It is not mentioned in the early reports.

<sup>&</sup>lt;sup>3</sup> See Montelius, II, B, Pl. 339, 7 a, b (Regolini-Galassi); *Mon. Ant.*, XIII, col. 242, Fig. 17 (Cumae); Helbig, II, p. 316, No. 1767 f (Barberini Tomb).

<sup>&</sup>lt;sup>4</sup> See Poulsen, p. 10 and Fig. 1 on p. 6, for a similar irrational grouping of decorative details.

- bent. It was originally a trifle over 13 cm. in height. The narrow flat base was about 6 cm. in diameter. The only decoration is just above the base, and consists of several horizontal bands of finely engraved concentric semi-circles with a point in the center, alternating in the different rows. They are now visible only on close scrutiny.
- 38. Pl. 30, Fig. 2. Small silver cup with narrow base, fragmentary and crushed flat. The distance from base to rim following the outline is 7 cm. The diameter of the base is about 2.7 cm. The only decoration consists of an incised band around the top formed of two series of double continuous parallel lines bent so as to form a row of interlacing arcs. This row is faced both above and below by a row of contiguous dotted concentric semi-circles. Within the cup is a fragment of gold foil.
- 39. Pl. 30, Fig. 3. Silver bowl similar to Nos. 32 and 33 1, fragmentary and crushed flat. The diameter of the top was between 10 and 11 cm. The decorative band below the rim consists of a scale pattern formed of four rows of well incised alternating contiguous semi-circles.
- 40. Pl. 28, Fig. 3. Fragment of silver hilt with inset blade of an iron dagger. The silver portion is 3.8 cm. in width and 9 mm. in height. It has a semi-circular notch on both of its long sides near the center of the edge toward the blade. The total length of the fragment is 9 cm. The fragment of the iron blade is badly rusted and has been in contact with some other object of which traces are still attached, possibly a sheath.
- 41. Pl. 30, Fig. 4. Silver strainer <sup>2</sup> formed of a flat strip 8.7 cm. broad and 12.5 cm. long. On three sides is an undecorated border 1.1 cm. wide. The remainder is perforated to serve as a strainer with diagonal rows of small holes.
- 42. Pls. 31, 32. Numerous fragments of thin silver strips ornamented with animals and decorative bands in relief. They were evidently nailed to some wooden object, possibly a chest similar to the one from the Tomba del Duce at Vetulonia <sup>3</sup>, as is shown by numerous rows of small holes, some with small nails still remaining, and by traces of wood on the under side of some of the pieces. The fragments are much bent, and are corroded to such an extent that it would be impossible to straighten them out. It is therefore difficult to piece the fragments together. The ornamental details were of the same nature as on the Vetulonia chest and consisted of numerous orientalizing animals, often heraldically opposed, surrounded by bands of palmettes and interlacing arcs. On

<sup>&</sup>lt;sup>1</sup> See note on No. 33 for attribution.

<sup>&</sup>lt;sup>2</sup> For a somewhat similar bronze strainer from Maz-

zano Romano see N. S., 1902, p. 595, Fig. 1.

<sup>3</sup> FALCHI, Pl. XII.

Pls. 31, 32 are shown the best preserved fragments, with some attempt to group together the different designs. In a few instances it is even possible to piece together the fragments <sup>1</sup>. On Pl. 31 the three pieces at the top to the left form part of a group with two heraldically opposed winged lions with a floral ornament between. The lion at the left is nearly all preserved. To the right of this group on the same plate (Pl. 31) are two fragments which fit together and show the upper portion of two goats in the usual <sup>11</sup> greeting <sup>11</sup> position.

At the top of Pl. 32 are three larger fragments which fit together. Of the design can be seen a lion with open mouth proceeding to the left. In front of it are portions of another animal with erect tail. Below to the right is a human head, probably of a sphinx. In the lower left hand corner of the same plate is a larger section with apparently the fore part of a wounded deer.

- 43. Pl. 33, Figs. 1-12. Fragments of silver vases <sup>2</sup> with no ornamentation. These fragments are selected from a large number which are piled up on a plate on one of the shelves in the museum. The vases had approximately the shape of the gold skyphos No. 20. A number of the handles are shown on the plate and fragments of the sides of two of the vases.
- 44. Pl. 33, Figs. 15, 16. Two fragments of silver serpentine fibulas. The section shown in Fig. 15 is the curved portion of the bow which adjoined the sheath. It is 3.5 cm. in length. At one end is a hollow transverse cylinder. At the other end it terminates in a point which engaged in the end of the sheath. The fragment shown in Fig. 16 (3.6 cm. in length) preserves portions of two curved members of the bow with a transverse section between which had originally a spherical knob at each end, although only one remains.

On Pl. 33 are two additional silver fragments which have no inventory numbers. Fig. 13 is a slightly curved strip of silver 3.9 cm. in length and 75 mm. wide. It has a semi-circular projection on one edge and two projecting bars on the other. Fig. 14 is circular in shape, 6 cm. in diameter, and probably formed the center of a cup or small bowl. It is ornamented with an incised pattern of dotted lines in circular and fanshaped groups.

On the same plate are four fragments from the storeroom. Figs. 17-19 are sections of tapering bronze tubes with a wooden core. They average 2.6 cm. in length. Fig. 20 is a fragment of ivory of uncertain meaning.

would doubtless lead to other restorations.

<sup>&</sup>lt;sup>1</sup> This is done by cutting out the pieces from photographs taken on the same scale and fitting them together. A careful study of all the pieces, including numerous smaller fragments which are in a bowl on the same shelf,

<sup>&</sup>lt;sup>2</sup> The inventory speaks of "about 150 fragments of silver with no ornamentation". This I take to refer to these vase fragments.

45-55. Pls. 34-41. Ivories ¹. The numerous ivory fragments are shown on eight plates. An attempt has been made to group the different types, and also to piece together the fragments wherever there is no doubt that they were originally joined. In the museum the fragments are displayed with little attempt at order, with the flat pieces on velvet backgrounds, and the balance in rows on one of the shelves. The ivory is so fragile that I was not permitted to handle the pieces except once for the purpose of taking the photographs. In order to determine the fragments which fit together it was therefore necessary to photograph all of the pieces on the same scale and then cut out and join together the different sections from the photographs. The result is quite satisfactory and in over forty instances the pieces which belong together have been found. A few of the fragments shown on our plates are not on exhibition, but are kept in the storeroom of the museum with numerous other fragments of bronze etc. which were not thought worth displaying ².

It is difficult to form an idea of the manner in which the ivories were employed. The numerous vertical and horizontal strips with incised lotus decoration (Pl. 34) were probably used to separate plaques with ornamentation in relief such as those shown on Pl. 34, Fig. 1, and on Pls. 35-37. They all seem to have been applied to a plane surface which was higher in the center than at the sides.

The fragments on Pls. 38-40 with bands of relief below, and animals in the round attached to the upper edge, have a curved outline and may have surrounded the rim of a situla or other receptacle, possibly of wood.

Many of the details of the reliefs are borrowed from Egypt, but the religious significance is lacking, and the scenes portray merely the more agreeable features of everyday life such as hunting (Pls. 35, 36), drinking (Pl. 34), and performing on musical instruments (Pl. 37). Other details resemble closely those on Hittite or Syrian reliefs<sup>3</sup>, and differ markedly from those on the silver bowls from the same tomb, a fact which would seem to point to a different place of origin.

The description of the ivories follows their arrangement on the plates. The museum numbers are given in the notes at the foot of the page.

<sup>&</sup>lt;sup>1</sup> Found at points i and l, Fig. 1 (on p. 13 above). Bull. Inst., 1876, pp. 124 f., 129; N. S., 1876, pp. 85 (21), 114 f. (41 f.), 287 (118); An. Inst., 1879, pp. 6 ff.; Helbig, II, p. 267, No. 1589; Perrot, III, p. 852 f.; Graeven, Antike Schnitzereien aus Elfenbein, (1903), pp. 70 ff.; Poulsen, p. 53.

<sup>&</sup>lt;sup>2</sup> Nearly all of these fragments have been photo-

graphed and are shown on our plates, grouped according to the material employed. In each case they will be referred to in the description of the plate on which they are placed.

<sup>&</sup>lt;sup>3</sup> See for example Pl. 36, Fig. 1, and Pl. 37, Figs. 3, 10.

# Pl. 34 (double). Ivory plaque with papyrus boat in relief, and ivory strips with incised lotus decoration.

Figs. 1-3. Plaque with ornamentation in relief, surrounded by flat strips with incised decoration which continues the central design. The central plaque is irregular in shape. The straight upper edge is 18.8 cm. in length. The lower edge is nearly parallel with the top for some distance and then slopes upward to the ends where the plaque is much narrower than in the center. The greatest height is 4.7 cm. The right end is 3.7 cm.; the left end 2.6 cm. in height. The ornamentation in low relief represents a papyrus boat of the usual type. The two ends of the boat terminate each in a spreading papyrus umbel with a raised outline. They are at present hollow but were once filled with colored paste. On the boat are six human figures comprising an oarsman at each end of the boat, and a seated man whom three women are busily engaged in supplying with drink. The man is seated at the left on a cushioned stool with a footstool beneath his feet. He is clad in a belted tunic. His long hair falls to his shoulders and is marked by vertical lines. In his right hand he holds the blade of a sword of which the handle with broad curved pommel rests on his shoulder. In his outstretched left hand he holds a cup into which a woman is engaged in pouring some liquid. The sides of the cup which the woman once held have been broken off, and the liquid appears to stream from her hand. It is depicted in the usual Egyptian manner as a continuous curved line from one cup to the other. The woman is clad in a full transparent garment though which her form is clearly visible. The robe has a scalloped border. Around her waist is a girdle. Between her and the male figure is a low stand bearing food or some other offering. Behind the woman is a low papyrus stem with a stylized umbel at the top. To the right of this another woman facing the one first described holds out a cup in her right hand. In her lowered left hand she holds the handle of a small pail. Her costume is the same as that of her companion. Behind her is a stand on which rest two large jars, represented in the Egyptian manner with the sides overlapping as if one were behind the other. The one to the left is in part broken away. Into these jars a third woman is engaged in pouring some liquid which in this case also is represented as a continuous stream 2. Behind her is another papyrus stem. At each end of the boat stands an oarsman clad in a short belted tunic.

Both to the right and left this plaque was adjoined by other sections, now incomplete, which were ornamented merely by incised lines. That they belong in this position

<sup>&</sup>lt;sup>1</sup> Museum No. 45. An. Inst., 1876, p. 249; Bull. Inst., 1876, pp. 124 f.; Mon. Inst., X, Pl. XXXI, 3; Perrot, III, Fig. 623; Montelius, II, B, Pl. 366, 3; Chron., Pl. LII, 9; Helbig, II, p. 267; Graeven, pp. 70 ff., Fig. 7 and Pl. 44 (a photograph).

<sup>&</sup>lt;sup>2</sup> Graeven thinks that in this and the other pouring scene to the left, a siphon is being employed. Egyptian reliefs show numerous examples of liquids represented in the air in this manner when being poured.

is made certain by the handles of the long paddles which the oarsmen hold, and which are represented by continuous lines which terminate on the side sections in broad leaf-shaped blades. The decoration of the side portions consists of zig-zag lines at the bottom to represent water, from which rise alternating lotus stems and palms. The lotus stalks terminate in lotus flowers, on each of which is seated a duck. The palms are considered to be on the shore in the background. The section to the right of the boat is the better preserved. Of it remains one large portion 1 and three smaller pieces. The largest of the three small fragments fits on the lower edge 2 of the section adjoining the boat and preserves the lower part of the broad blade of the paddle and several of the zig-zag lines representing water. The two very small fragments to the right (Figs. 2, 3) are in the storeroom of the museum and have never been exhibited. On Fig. 2 is the stem of a palm; on Fig. 3 is one of the lotus flowers on which sits a duck.

On the left edge of the relief plaque is incised the right side of another lotus flower with the duck above. The design was doubtless completed on the missing portion of the section to the left. Of the portion to the left of the boat there remain at present onlythree badly damaged fragments, of which the largest is 7.2 cm. in length. The strip above this with the tops of the palms is warped and does not fit exactly, but doubtless belongs in this position.

Inasmuch as the lower part of the boat is not represented on the central plaque it is probable that it was incised on still another section which is now missing.

Figs. 4-24. The remaining fragments on Pl. 34 are of either vertical or horizontal strips with incised lotus decoration <sup>3</sup>. In some instances, and possibly in all, the calyxes of the lotus flowers were covered with gold foil, of which some fragments remain <sup>4</sup>. On the horizontal strips the lotus flowers alternate with buds. The strips not only vary in height, but also taper gradually, some from right to left, and some from left to right. Fig. 7 seems to have continued Fig. 4 to the right, and the two together to have formed one long strip which was higher in the center than at the sides. The vertical strips are divided by horizontal lines into rectangular sections in each of which is one lotus flower with a bud on each side. In Figs. 22 and 23 some of the lotus blossoms are upside down, as if at that point the design of which they formed the frame were intended to be regarded from the other side. The horizontal strips were of considerable length, as is shown by the many sections which fit together, as in Figs. 4, 6, 9 and 15.

Figs. 10, 11, 12, 13, 14, 19, 20 and 21 are from fragments in the storeroom of the museum. Fig. 19 is pieced together from three fragments, and Fig. 20 from four.

<sup>2</sup> Not at some distance below, as erroneously restored by GRAEVEN, p. 71, Fig. 7.

Length 8.1 cm.; height 4.5 cm. on the left side.

<sup>&</sup>lt;sup>3</sup> An. Inst., 1879, p. 6; Mon. Inst., XI, Pl. II, 6. This is the same fragment as that on our Pl. 34, Fig. 17.

It is reproduced by Montelius, II, B, Pl. 366, 8. See also Graeven, pp. 73 ff., and Pl. 45, which is a photograph of the piece shown on our Pl. 34, Fig. 24. See also Poulsen, p. 69.

<sup>\*</sup> E. g. on Figs. 4, 7, 18, 24.

#### Pl. 35. Fragments of ivory reliefs 1.

Figs. 1 to 7. Sections of a frieze with a scene corresponding to that represented on Pl. 34, Fig. 1. In this case the women are performing on musical instruments, and apparently before a seated female figure. The frieze is on a slightly larger scale than that of the papyrus boat, and is 6.9 cm. in height. It does not appear to become narrower at the sides as is the case with the sections on Pls. 36 and 37. The women wear the same costume as those on the papyrus boat, the only difference being that their head dress has a raised outline enclosing a hollow space which was originally filled with paste.

Fig. 1. Woman <sup>2</sup> facing to left with a curved object in her hands, possibly the end of a harp. To the right the relief is broken and preserves only a portion of another figure which faces to the right and holds in the lowered right hand a receptacle or pail resembling that in the hand of one of the women on the papyrus boat. (Pl. 34, Fig. 1).

Figs. 2-4. The two sections shown on Figs. 2 and 3 certainly belong together. In Fig. 2<sup>3</sup> is represented a woman holding a stringed musical instrument of which the edge of the frame is completed on Fig. 3. At her feet is an object of uncertain meaning. Behind the woman in Fig. 2 is the fore arm and a trace of the robe of another figure. On the arm rests a long object with a curved end, which has been interpreted as being part of a miniature papyrus boat, but which seems to resemble more closely the handle of a guitar or similar musical instrument. Below the hand is a cylindrical object. Fig. 4 preserves a small section of the robe and body of a female figure, possibly the same as the one whose head and right arm appear on the right edge of Fig. 3.

Figs. 5-9. Fig. 9 is formed by fitting together the fragments shown in Figs. 6-8, and represents the lower portion of a seated female figure. She sits upon a light wicker stool of the type already seen on the papyrus boat (Pl. 34, Fig. 1) and rests her feet on a footstool. In front of her is a lotus flower between two buds. They are upside down, and were probably represented as held in the now missing hand of the woman. Fig. 5 is one of the fragments on the museum shelves with part of the lotus flower, the woman's toes, and part of the footstool. Fig. 6 is of the same fragment with the addition of a small piece from the storeroom which completes the lotus flower. Fig. 7 is also from the storeroom and preserves the feet and a bit of the robe of the seated figure. Fig. 8 has always been on exhibition. On it are represented the stool, part of the robe of the seated figure, and one of the lotus buds.

Figs. 10-12. Fragments of uncertain meaning. At the top of Fig. 10 is a human fore arm and hand. Fig. 12, with a trace of a wing, is from the storeroom.

The majority of the fragments shown on Pls. 35-37 are displayed on a velvet covered board in the museum and bear the inventory numbers 46 to 51.

<sup>&</sup>lt;sup>2</sup> Mon. Inst., XI, Pl. II, 3.

<sup>&</sup>lt;sup>3</sup> Mon. Inst., XI, Pl. II, 1; Montelius, Pl. 366, 4; Chron., Pl. Lll, 14; Poulsen, Fig. 46.

Figs. 13-15. Fragments of an open-work relief with a "cup palmette" (Schalenpalmette), or palmette with reversed volutes, within which stood two griffins back to back! All that remains is a portion of the scrolls below the palmette (Fig. 15), and the wings of the griffins (Figs. 13, 14) which are placed on Pl. 35 in approximately their original position above Fig. 15. The wing in Fig. 13 is 5.1 cm. in length; that in Fig. 14 is 6.7 cm. The different sections of the wings and of the palmette and scrolls were bordered by raised lines, and the spaces between the lines were filled with colored paste. On the scrolls the spaces between the lines were at least in part filled with strips of gold foil cut to follow their outline. Traces of the gold and of the paste filling still remain. Above the scrolls of Fig. 15 is a section of the reversed volutes on which the griffins stood, and on its upper surface are two slight projections which may be the feet of one of the griffins.

Fig. 16. A section of a wheel which had the spaces between the spokes inlaid with amber. One piece of amber still remains.

Figs. 17-19. In Figs. 18 and 19 are represented three fragments <sup>3</sup> of a combat between a man and a griffin <sup>4</sup>. In Fig. 17 the three fragments are shown fitted together in their original relation. Of the griffin the lower half remains; of the man, merely the lower portion of one leg.

Fig. 20. Fragments of a curved strip of ivory with inset buttons of amber covered with gold foil <sup>5</sup>.

Pl. 36. Fragments of ivory reliefs with a chariot and horseback riders. These plaques are lower than those on Pl. 35, Figs. 1-9, and they narrow rapidly toward each end. The height in the center was about 6.3 cm.

Figs. 1-6. Chariot with two occupants followed by a rider. The section shown in Fig. 6 is the one which is well known and has often been published 6. Fig. 1 shows the same piece with the addition of the fragments shown on Figs. 2-5, and with two long sections placed below which certainly belong to the relief, although the connecting links have been lost. On one of them are the feet of the horse attached to the chariot, and part of the wheel. On the other is part of the wheel and the feet of the horse of

<sup>&</sup>lt;sup>1</sup> For similar reliefs from Nimrud see Poulsen, Figs. 37, 39. Our example is mentioned by him on p. 49, note 1.

<sup>&</sup>lt;sup>2</sup> Fig. 15 is given by MONTELIUS, Pl. 366, 7, from an original drawing, but upside down.

<sup>&</sup>lt;sup>3</sup> Fig. 19 is made up two fragments of which the smaller piece to the right above the legs of the griffin is turned face downward.

<sup>&</sup>lt;sup>4</sup> For similar combats, with the man and griffin in the same relative position, see Poulsen, Zur Zeitbestim-

mung d. Enkomifunde, Jahrb., 1911, p. 223, Fig. 8 (from Cyprus), and p. 226, Fig. 10 (from Nimrud). See also Perrot, III, Fig. 546 (bowl from Dali).

<sup>&</sup>lt;sup>5</sup> Museum No. 52. The inventory states that the buttons are of ivory, but the one I was permitted to examine seemed to be of amber.

<sup>&</sup>lt;sup>6</sup> Mon. Inst., XI, Pl. II, 5; Montelius, II, B, Pl. 366, 6; Chron., Pl. LII, 10; Studniczka, Der Rennwagen im Syrisch-phoenikischen Gebiet, Jahrb., 1907, p. 172, Fig. 19; Poulsen, p. 53 and Fig. 45.

the rider. Fig. 2 preserves the hands of the driver and the double reins. Fig. 3 consists of two pieces of which one is shown face downward in the photograph in the way it has always been displayed in the museum. Fig. 4, with part of the wheel, and the tail of the horse, is in the storeroom of the museum. Its addition makes certain the position of the wheel in relation to the chariot frame, and also the fact that it had but six spokes.

The representation is of a chariot in which stand two figures, a driver and a man with drawn bow. Behind the arm of the bowman is a spear which leans against the side of the car with the handle within <sup>2</sup>. Behind the chariot is a horseback rider. All three figures have a head dress with hollow center for inlaying, and are clad in the usual belted tunic. The chariot form with the six-spoked wheel is earlier than the eight-spoked variety on the silver bowls Nos. 23, 25, and is of the type found on Hittite and early Assyrian reliefs <sup>3</sup>.

Figs. 7, 8. Two fragments which belong together and probably originally formed part of a chariot similar to that in Fig. 1. To the left in Fig. 7 is the head and one arm of a man with a whip in his hand. In the air is the lower part of a much stylized sacred hawk. To the right is the head of a horse, of which the mane and part of the body are continued on Fig. 8, together with the end of the reins. Fig. 9 with a hand holding some curved object may belong to this relief.

Fig. 10. Fragment with part of a horseback rider.

Figs. 11-13. Three fragments which belong together, with a rider, and the end of a branch on which rests a bird.

Fig. 14. A long fragment from the storeroom, evidently the upper portion of a relief. All that remains of the decorated part is the top of a human head hollowed out to receive paste inlaying.

Figs. 15, 16. Two fragments which belong together, with another rider who held a spear in his outstretched left hand. The head and legs of the horse and many other portions are missing.

Fig. 17. The tail of one horse and the fore part of another.

Fig. 18. Part of two legs of a horse.

Fig. 19. Fragment 4 with nearly all of one rider and one arm and the tail of the horse of another. Between them is a group of three papyrus stems with nodding umbels.

Fig. 20. Fragment with 4 horses' feet.

Figs. 21-24. Four fragments from the storeroom with horses' feet (Figs. 23, 24),

<sup>&</sup>lt;sup>1</sup> See STUDNICZKA, op. cit., p. 172, where some doubt is expressed.

<sup>&</sup>lt;sup>2</sup> STUDNICZKA, loc. cit., speaks of two spears, mistaking the bow string for another.

<sup>&</sup>lt;sup>3</sup> For other Hittite details see Pl. 37, Figs. 3 and 10.

<sup>&</sup>lt;sup>4</sup> Mon. Inst., XI, Pl. II, 4; Montelius, II, B, Pl. 366, 5; Chron., Pl. LII, 6; Poulsen, Fig. 44.

a bit of a tail (Fig. 21), and the base of a palm (Fig. 23) which may belong with Pl. 37, Fig. 7.

Pl. 37, Figs. 1-21. Fragments of ivory reliefs with hunting scenes, similar in size and style to those on Pl. 36.

Figs. 1, 2. A large fragment with one horse and rider nearly complete, and one spear-bearer on foot. The rider proceeds to the right and holds a spear in his outstretched left hand. The fragment (Fig. 2) with part of his right leg and the adjoining portions of the horse, is separate in the museum, and there is a corresponding vacant space on the piece shown in Fig. 1. Our photograph (Fig. 1) shows the fragment in place, and it is also repeated below in Fig. 2, in order to show its exact form. At the right on Fig. 1 are the hind legs of another horse.

Fig. 3, with a dog running below a horseback rider, is probably a continuation of Fig. 1. It is formed of the two sections shown in Figs. 4 and 5. When placed together as in Fig. 3 they reproduce a motive common on early reliefs from the East. An example occurs on a Hittite relief from Malatia 2 which is of special interest inasmuch as on the same relief is represented a chariot with a six-spoked wheel (see Pl. 36, Fig. 1), and a stag with horns resembling those on Fig. 10 below. (Pl. 37, Fig. 10).

Fig. 6. A small fragment with part of a horseback rider similar to the one in Fig. 3. All that remains is the right leg of the rider above the knee, with the characteristic vertical and horizontal ribs to indicate his garments; his hand resting on the back of the horse; and at the extreme right the horizontal ribs indicating the lower part of the mane of the horse.

Fig. 7 is made up of two fragments which belong together. The only detail clearly recognizable is the upper portion of a palm tree at the left which possibly belongs with the fragment shown on Pl. 36, Fig. 23, on which is shown the base of a palm trunk.

Figs. 8-10. Fig. 10 is formed by fitting together the two fragments shown on Figs. 8, 9. The result is the head of a stag with spreading horns. This indicates that one of the ivory reliefs represented a stag hunt, probably with details corresponding to that on the Hittite relief from Malatia referred to in connection with Fig. 3 above. (Pl. 37, Fig. 3).

Figs. 11-21. Small fragments from the storeroom of the museum. The only clearly recognizable detail is the tail of a horse on Fig. 12.

# Pl. 37, Figs. 22, 23. Lion with dead human being on its back 3. Length

<sup>&</sup>lt;sup>1</sup> Mon. Inst., XI, Pl. II, 2.

<sup>&</sup>lt;sup>2</sup> MEYER, Reich u. Kultur d. Chetiter, Pl. VII.

<sup>&</sup>lt;sup>3</sup> This fragment is mentioned twice in the *Notizie* (N. S., 1876, pp. 87 [23], 287 [118]), but nowhere else except in my recent article, *Atti Pontif. Accad.*, Ser.

II, Vol. XIV, 1919, pp. 114 f., and Fig. 1. In the *Notizie*, reference is made to several similar specimens, either through error, or else the ivories have deteriorated so much since 1876 that details which were then visible have since disappeared.

8.11 cm.; height 3.4 cm.; width 1.7 cm. Figs. 22 and 23 give two views of this much battered fragment of which the original appearance can best be determined by referring to the much better preserved example representing the same subject in the Barberini collection in the Museo di Villa Giulia <sup>1</sup>. There we see that the lion has overcome one of its enemies and holds in its mouth one leg of the dead body, which is represented as stretched out along the lion's back. In our example, which is of smaller dimensions and poorer workmanship than the Villa Giulia specimen, all that remains is a small portion of the lion's body with the upper part of the human being stretched out face downward on its back. The head of the dead body is turned sidewise so that the features appear in profile <sup>2</sup>, and the hair streams out along the lion's back. One arm is pressed against the side, the other hangs down inert along the lion's flank. (Fig. 23). The nail which attached the lion to some object on which it rested passes through the human head just back of the eye.

Pl. 38. Slightly curved ivory fragments covered with blue glaze and decorated in relief on the lower surface, and with applied animals in the round above <sup>3</sup>. The curved outline suggests that they originally surrounded the rim of some receptacle. The upper section of these strips is 4.5 cm, in height, and has as its only decoration alternating griffin heads and crouching animals in the round, which were nailed to its surface. Below this section the surface of the strips retreats slightly and they become thinner. On this portion are figures of human beings and animals in low relief. An enamel glaze covers the entire surface, and in certain instances additional decoration was given by means of strips of gold foil <sup>4</sup>.

Figs. 1, 2. Fragment of ivory rim. (Two views). To the upper section is nailed a well preserved griffin head and neck 4.3 cm. in height. The head has prominent eyes, long slender ears and a short rounded crest. The sharply curved upper and lower portions of the beak define an almost perfect circle which is open is the center and possibly served for the attaching of one of a series of a chains by means of which the receptacle could be suspended. On the relief section below is represented the rear half of a winged animal with erect tail and wing.

Figs. 3, 4. Two views of a larger fragment, 4 cm. broad and 7.9 cm. in height. On the upper section to the left is the base of one griffin neck of which the head is missing. To the right in a vertical position is the body (the head is missing) of a

<sup>&</sup>lt;sup>1</sup> Della Seta, Boll. d'Arte, 1909, pp. 175 f., and Fig. 11.

<sup>&</sup>lt;sup>2</sup> In the example in the Museo di Villa Giulia the human figure reclines on its back facing upward.

<sup>&</sup>lt;sup>3</sup> An. Inst., 1876, p. 252; Mon. Inst., X, Pl. XXXI, 5 (badly drawn but probably the same as the one shown

on our Pl. 38, Figs. 5, 6), and 6 (probably the one shown on our Pl. 38, Fig. 13); Helbig, II, p. 268, No. 1591; Graeven, p. 75, Pl. 47 (the same as our Pl. 38, Figs. 5, 6); Karo, Bull. Pal. It., XXIV, pp. 154 f.

4 See description of Pl. 38, Figs. 5, 6 and 13.

crouching animal on the back of which is stretched out the body of a smaller animal resembling a panther, probably represented as dead. From the example on Pl. 39, Fig. 2 it is evident that the larger animal had one foot of the smaller one in its mouth. As in all of the other examples, the group is attached to the rim by means of a large bronze nail which passes through the center of the larger animal's back. On the relief section below is preserved the head and part of the body of a man who has placed one hand in the mouth of a winged animal. The man has the prominent straight nose continuing the line of the forehead which is common on Hittite reliefs. Of the animal only the head and wing are preserved.

Figs. 5, 6. Two views of a large fragment 7.2 cm. broad and 8.1 cm. in height '. On the upper section to the right is the lower portion of the neck of a griffin. To the left is a well preserved crouching animal 2 which for the sake of convenience both here and in the case of the other examples we shall term a lion, to avoid using the more awkward expression " feline animal ". The lion is 4.8 cm. in length and 3.2 cm. high. The head is slightly raised and has broad and well modelled ears. The tail is curled up on the flank. The back was once ornamented with a strip of gold (see also Pl. 38, Fig. 13) of which the imprint is still visible extending halfway down each side. To the left on the lower section of the fragment is the upper portion of a combat between a man and a winged animal. To the right is a human figure with the body represented in front view and the head in profile to the left. The figure wears a clinging garment. The right hand hangs at the side. In the outstretched left hand it holds by the hind legs an animal of which the head is now missing.

Fig. 7. Above is the lower portion of the neck of a griffin. Below are the much injured traces of two standing figures which appear to hold an animal between them upside down.

Fig. 8. Fragment which until recently was exhibited together with those shown on Pls. 35-37. It evidently belongs to the present series and has now been placed on the same shelf. All that remains is a small portion of the relief section with the rear part of a winged animal with erect tail. To the right is seen the tip of the wing.

Figs. 9-14. Six detached necks which were once attached to the rim as in the above described examples. Fig. 13 still preserves the griffin head, which resembles closely the one shown in Figs. 1 and 2, except that the ends of the beak meet and enclose a complete circle. One of the slender ears of Fig. 13 is broken off. The height is 4.5 cm. It is probably the example represented in the *Monumenti* 3 with the statement 4 that

<sup>&</sup>lt;sup>1</sup> Graeven, p. 75, Pl, 47.

<sup>&</sup>lt;sup>2</sup> Probably the same as that represented in the inaccurate drawing in *Mon. Inst.*, X, Pl. XXXII, 5.

<sup>&</sup>lt;sup>3</sup> Mon. Inst., X, Pl. XXXII, 6. Also in GRAEVEN,

p. 76, Fig. 8.

<sup>&</sup>lt;sup>4</sup> An. Inst., 1876, p. 252.

it was ornamented with two strips of gold, one across the neck in front, and one on the head behind the crest. The surface of the glaze still has a lighter color at these points. Fig. 10 differs from the others in having the fore-legs represented. The head too seems of a different type.

- P1. 39, Figs. 1-7; 9; 14-18. Fragments of ivory lions which were probably attached to the rim of a receptacle in the same manner as those described above (Pl. 38, Figs. 3-6). In addition to the type with a dead animal resembling a panther on the back (Figs. 1, 2, 5) is another in which the lion has hanging from its mouth a portion of a human figure (Figs. 3, 4 etc.).
  - Fig. 1. Head of lion missing. The animal on the lion's back is well preserved.
- Fig. 2. A similar figure with the lion's head preserved. One leg of the smaller animal is held in the lion's mouth. Length 4 cm.
- Figs. 3, 4. Two views of a lion with the lower part of two human legs projecting from its open mouth. Between the human legs is a long object, possibly the lion's tongue, or perhaps intended to represent part of the garment of the victim. The height of the fragment is 3.2 cm.; the length 4.8 cm. Across the lion's back is the impression of a gold band, now disappeared, which extended half way down each side of the lion.
- Fig. 5. Lion, 4.3 in length, with tongue (?) hanging far out. The animal on its back is smaller than in Figs. 1, 2.
- Figs. 6, 7, 9, 14-18. Fragmentary figures of lions. Figs. 17 and 18 are from the storeroom. Of Fig. 17 only the head remains; of Fig. 18 the right side of the head and part of the animal on the back.
  - Pl. 39, Figs. 8, 10, 11-13, 19-21. Various ivory fragments.
- Fig. 8. Figure resembling a horse, 4.7 cm. in length, of which only the head and mane is well preserved. It was apparently trampling upon a human figure which lay upon the ground facing upward. At present only the head of the human being remains, with the hair indicated by incised parallel lines along the top and down the back.
- Fig. 10. Rear end of a larger crouching animal with a tail indicated on each side as passing between the legs and the body and ending in a broader section marked by diagonal striations on the animal's flanks. The figure was well modelled and the remaining portion is in a good state of preservation.
- Figs. 11-13. Three views of a fragment of a small male figure 1, 4.9 cm. in height. The only portion preserved is the right side of the body down to the knee. Of the

as intact. Either the fragment has been injured since the drawing was made, or (as is more probable) the artist employed made too free a use of his imagination in interpreting the details.

<sup>&</sup>lt;sup>1</sup> This is the only object in the collection even remotely resembling the drawing given by MONTELIUS, II, B, Pl. 366, Fig. 2, and labelled as original in his list of plates. In this reproduction the head is represented

head only the right ear remains and a part of the long hair, of which two large masses marked by vertical striations were brought forward over the shoulders and hung down the breast, where they were probably held by the hands. The right arm remains, with the elbow pressed against the side and the forearm extending forward, but the hand is broken off. A third mass of hair, marked by diagonal striations as if braided, falls down the back, commencing at the dividing point of the longer masses which fall in front. The right half of this braid (all that is preserved) curls up on the right shoulder and resembles the typical Syrian or Hittite spiral lock <sup>1</sup>. The figure was apparently nude.

Figs. 19, 20. Two views of a curved ivory fragment <sup>2</sup> 8 cm. long and 1.9 cm. in height. Attached to the upper side, or perhaps formed of the same piece of ivory, are two animal hoofs. The outer side of the fragment has a convex outline. The upper and lower edges project slightly and border a sunken horizontal space in which remain five applied S-shaped ornaments of blue paste <sup>3</sup>. The fragment seems to have formed part of the rim of the cover of a receptacle of some nature, and to have been ornamented on its upper side with standing animals in the round.

- Fig. 21. A fragment from the storeroom, apparently part of the same cover as Figs. 19, 20.
- Pl. 40. Ivory fragments, the majority of which are too much injured to merit description 4.
- Fig. 1. A fragment, 6.2 cm. in length, of a larger animal than those shown on Pls. 38, 39. The only portion recognizable is the upper part of the right fore leg.
- Figs. 3, 10, 15, 18 are from the storeroom. Fig. 15 is part of an ivory ring which was 3.7 cm. in diameter.

Figs. 16, 17 may belong with Pl. 39, Figs. 19-21.

Fig. 19. Ivory fragment 9.3 cm. long and 4 cm. broad, surrounded on three sides by a strip of bronze fastened by numerous round headed nails.

Figs. 13 (length 7.1 cm.), 14 (length 9.3 cm.) and 20 (length 10.8 cm.) may be fragments of still larger animals. The broader section of Fig. 20 (to the right in the photograph) has traces of careful modelling resembling the mane of a lion.

# Pl. 41, Figs. 1, 2. Two bronze handles 5 each with six attached ivory

1 See Poulsen, pp. 43 ff.

Mon. Inst., X, Pl. XXXII, 7; HELBIG, II, pp. 267 f., No. 1590; GRAEVEN, p. 74, Pl. 46 (a photograph). The Monumenti drawing is very inaccurate. It shows six lions, all well preserved, from which fact Graeven argues that the handle must have been damaged at a later period. It is more reasonable to suppose that the artist for the Monumenti paid little attention to the actual details.

<sup>&</sup>lt;sup>2</sup> Graeven, pp. 74 f., and Pl. 47 (a photograph).

<sup>&</sup>lt;sup>3</sup> Not of metal as Graeven states.

<sup>&</sup>lt;sup>4</sup> There remain on the shelves of the museum a very few fragments which have not been photographed, but nothing of even as much importance as the pieces shown on this plate.

<sup>&</sup>lt;sup>5</sup> Museum Nos. 54, 55. An. Inst., 1876, p. 252;

lions. Each handle is formed of two superposed flat strips of bronze 1.3 cm. broad, terminating at each end in a piece of wire which is bent to form two successive loops. Threaded on these loops still remain three ivory rings which formerly supported pendant ornaments of which the lower portions have been broken off. The handles are 18 cm. in width (inside) and 8.3 cm. in height. Attached to the upper surface of each are six crouching ivory lions, three on either side facing the center of the handle. Their average length at the base is 3 cm. They have open mouths with very prominent teeth, and resemble in form the lions on Pl. 39. Their tails however, instead of being curled up on their flanks, are erect and bent forward with the tip resting on the back. The majority of the lions are now fragmentary, as the upper portions have split off in flat sections following the line of cleavage of the ivory. Each of the two central lions in Fig. 1 has glued to the top of its head an additional face and ears belonging to one of the other specimens, — the work of course of a modern restorer.

This concludes the description of the ivories. The subsequent pages follow the order of the museum inventory.

- 56-59. Pl. 42. Amber fragments, consisting mainly of perforated disks and small triangular pieces. Some of the disks probably formed part of sword handles as in No. 28. In the second row from the top several of the disks alternate with fragments of ivory, all with a metal core. In the center of the upper row is a larger unperforated disk 3.8 cm. in diameter, with a convex outer surface. The circular piece at the right-hand end of the same row has a large hole near the center which was apparently filled with paste, and is surrounded by seven smaller holes in which are traces of wooden pegs. The triangular pieces in the two lower rows were probably used for inlaying.
- 60. Pl. 43, Fig. 1. Bowl of dark blue glass, 7.5 cm. in height and 10.2 cm. in diameter at the top. The bowl is hemispherical in shape, of severely simple but graceful outline, and has a beautiful irridescent surface. According to the Bullettino report it was found inside No. 24.
- 61. Pl. 43, Fig. 3. Small pear-shaped vase <sup>3</sup> of coarse clay with a greenish glazed surface, made up of several fragments glued together. It had once a slender neck which is now missing. The present height is 5.6 cm. The diameter of the base is 2.1 cm. It was found with other porcelain fragments near the north side of the tomb <sup>4</sup>.

<sup>&</sup>lt;sup>1</sup> Bull. Inst., 1876, p. 129; N. S., 1876, p. 115 (42); Helbig, II, p. 267, No. 1588; Montelius, Chron., p. 101. In Helbig the museum number is wrongly given as 38, and the bowl is stated to have been found in No. 26 instead of No. 24.

<sup>&</sup>lt;sup>2</sup> Bull. Inst., 1876, p. 129.

<sup>&</sup>lt;sup>3</sup> An. Inst., 1879, p. 14; Mon. Inst., XI, Pl. II, 12; Bull. Inst., 1876, p. 130; Montelius, II, B, Pl. 366, 14; Chron., p. 101, Fig. 246.

<sup>&</sup>lt;sup>4</sup> Bull. Inst., 1876, p. 130.

The decoration consists of shallow impressed diagonal lines around the center of the vase and is probably intended to suggest a lotus pattern. Around the top are horizontal impressed lines.

- 62. Pl. 43, Fig. 2. Lower portion of a glazed bowl with rounded slightly pointed base. It is made of coarse clay with a bluish glazed surface.
- 63. Pl. 44, Figs. 7-10. Four fragments of Proto-Corinthian ware with linear decoration. One fragment (Fig. 10) has a skyphos handle. Figs. 7 and 8 are from a skyphos rim and formed part of a vase which was decorated with parallel horizontal lines around the body and with alternating groups of wavy and straight parallel vertical lines around the rim. Fig. 8 is 5.8 cm. broad. The fragment shown in Fig. 9 is from another type of vase and preserves part of the base with parallel horizontal lines above. According to Helbig 2 the fragments were found in the débris above the tomb, but the only reference given is a note by Undset 3 written many years after their discovery. The published contemporary records are silent on the subject. As the fragments are included in the museum inventory, they probably came from the tomb.
- 64. Pl. 44, Figs. 1-6; Pl. 45. Deep bronze bowl 4 with hammered decoration in very high relief. With it belongs the inner shell (Pl. 45, Fig. 3), listed in the museum as No. 69, and also four small animal and human heads of paste (Pl. 44, Figs. 3-6) which originally served as filling for the raised heads on the bowl, but are now exhibited without numbers as separate specimens.

The height of the bowl is 11.2 cm. The low foot is 5 cm. in diameter at the base. Of the outer casing two pieces remain, one larger (Pl. 44, Fig. 2; Pl. 45, Figs. 1, 2) comprising about half of the bowl including all of the foot, and one smaller (Pl. 44, Fig. 1) with one of the palmettes. The lower edge of the smaller fragment fits the broken edge of the foot of the larger section. When it is placed in position only a few pieces of the entire bowl are missing.

The decoration of the bowl in high relief produced such an uneven surface within, that an inner shell (Pl. 45, Fig. 3) was added to conceal the inequalities. This was found detached and is still listed and exhibited as a separate bowl No. 69. Its original position is proved by the fact that the broken edges fit perfectly to a section remaining

6, and Chron., p. 102, Fig. 248. See also Poulsen, pp. 126 f., and Fig. 139 (reproducing the drawing in Montelius). See also Pettazzoni, Röm. Mitth., 1909, pp. 325 f., and Pl. VI, A, from a good photograph, but reversed in the reproduction. Helbig gives the museum number as 105 instead of 64.

<sup>&</sup>lt;sup>1</sup> Helbig, II, p. 268, No. 1592; J. H. S., 1912, pp. 342, 344 (Lorimer).

<sup>&</sup>lt;sup>2</sup> Helbig, II, p. 268.

<sup>&</sup>lt;sup>3</sup> An. Inst., 1885, p. 31, note 1.

<sup>&</sup>lt;sup>4</sup> An. Inst., 1879, p. 14, Pl. C, 2 (an unusually incorrect drawing); Helbig, II, p. 269, No. 1595. Another incorrect drawing is in Montelius, II, B, Pl. 367,

within No. 64. Near the rim of No. 64 are traces of four rivets, two on each side, by means of which the inner shell was attached 1.

The heads which form part of the decoration of the bowl are in such high relief that it was thought best to give them additional support by a filling of light porous paste. This when pressed into the large hollow spaces inside the heads naturally assumed their shape. When the two bowls became separated these inside impressions of the raised heads fell out and were picked up and placed on exhibition as separate terra cotta figures, although in reality they fit perfectly into the cavities and were not intended to be seen. The two specimens shown on Pl. 44, Figs. 5, 6, are the filling for the two bulls' heads; Fig. 4 is the filling for one of the lions' heads, and Fig. 3 for one of the human heads.

The decoration of the bowl is difficult to determine in all of its particulars on account of the corrosion of the surface, and the fact that several fragments are missing. The main feature consisted of four human heads in very high relief, placed just below the rim on opposite sides of the bowl. Two of these heads remain intact. The hair of each falls in heavy masses on either side of the face and is marked by parallel horizontal striations. This is the type of head-dress termed by Poulsen <sup>2</sup> a "layer wig". It is of frequent occurrence on objects of the 7th century B. C. A good example is seen on a piece of jewelry from Rhodes <sup>3</sup> where we find the same type of head as on this bowl, with high cheek bones, and large oval prominent eyes. A fairly close parallel is also found in the winged figures attached to cauldron No. 75 from this tomb, on which the treatment of the eye is quite similar.

Near the foot of the bowl beneath each remaining human head is the head of an animal, one of a bull and one of a lion. Traces of two similar heads remain on the opposite side of the bowl. The bull's head is nearly oblong in shape, with a very broad nose. It has the forehead marked with diagonal lines. The lion's head has a rounder and more projecting nose, and seems more lifelike.

Between each of these animal heads and the corresponding human head above are two entwined bodies of which the one above is apparently of a serpent, and the one below of a lion with a long serpent-like body. The hind quarters of each pair of these lions are placed back to back in the space between two of the animal heads (Pl. 45, Fig. 2). Their bodies extend along the tops of the animal heads and disappear beneath the necks of the serpents. The serpents tails curl upward into the provokingly missing sections above the hind quarters of the elongated lions. Their bodies extend beneath the chins of the human heads and then bend sharply down over the elongated lions 4. Their

<sup>&</sup>lt;sup>1</sup> Described in An. Inst., 1876, p. 14 as probably for the attaching of handles.

<sup>&</sup>lt;sup>2</sup> Etagenperücke <sup>11</sup>. See Poulsen, Chap. XI. His description of the bowl is on pp. 126 f.

<sup>3</sup> Marshall, No. 1103; Poulsen, Fig. 158.

<sup>&</sup>lt;sup>4</sup> The artist who made the drawing reproduced in Montellus, II, B, Pl. 367, 6, represented this section as an arm and hand.

heads come just below the two iris palmettes which fill the space between the human heads on the sides opposite to the section occupied by the tails of the serpents. What became of the heads of the elongated lions is uncertain.

In judging the artistic qualities of the bowl one must consider how much the surface has been destroyed. The better preserved inner shell shows that it was made of excellent material. Surely there is exaggeration in the description of Poulsen 1 who speaks of the 1 roughly modelled figures resting on lions' and bulls' heads, and holding iris flowers in their hands in clumsy imitation of Phoenician models 1. This criticism applies very well to the similarly decorated bowl in the Barberini collection 2, which is extremely ugly and may well be a local imitation. The bowl which has just been described (No. 64) has many excellent features, and if not imported was at least made by a skilful workman.

65. Pl. 46. Bronze bowl <sup>3</sup> with bluish patina. Height 9 cm. Inside diameter at the rim 21 cm. The decoration is in high relief, as on No. 64. The inner shell is still in place.

The bowl has a flat bottom with a circular ridge in the center from which radiate upward toward the rim five raised bands on which rest the horns of as many poorly modelled bulls' heads in high relief, with their noses pointing upward toward the rim. On account of the corrosion of the surface few of the details can be distinguished <sup>4</sup>. The horns, eyes and other features are indicated by incised lines.

The five raised bands serve as frames for five semi-circular sections of the surface of the bowl, in the center of each of which is a human head, probably female, in high relief. These heads have elaborate head-dresses which differ from those on No. 64 in being more naturalistic, and having the divisions marked by diagonal instead of horizontal lines. Below each head the bust of the figure is indicated by a raised, undecorated, circular section, reminding one of similar portions of certain gold pendants 5 with a shell or a palmette below.

The inner bowl is formed of a thin metal plate and is without decoration. The space between it and the outer bowl is filled with a substance resembling pitch. The outer bowl is much corroded and portions of the human heads have broken off and been

<sup>&</sup>lt;sup>1</sup> Poulsen, p. 127, lines 22-24.

<sup>&</sup>lt;sup>2</sup> See Boll. d'Arte, 1909, Fig. 12, p. 175; POULSEN, Fig. 140, p. 127. This type of bronze bowl with raised decoration occurs in other tombs. A good example comes from Satricum and is now exhibited in the Conca room at the Museo di Villa Giulia, No. 11943.

<sup>&</sup>lt;sup>3</sup> An. Inst., 1879, p. 14, Pl. C, 1, 1 a (from incorrect drawings); the same drawings in Montelius, II, B, Pl. 366, 10 a, b; Chron., p. 102., Fig. 247 a, b; Poulsen, p. 126, Fig. 138 (side view only). Good photographs

are in Röm. Mitth., 1909, p. 326, Fig. 4 (side view) and Pl. VI, B (bottom). The bowl is described by HELBIG, II, p. 270, No. 1602 (museum number wrongly given as 66); POULSEN, p. 126; Röm. Mitth., 1909, pp. 326 f., (Pettazzoni).

<sup>&</sup>lt;sup>4</sup> Previous descriptions have not recognized the nature of these endings and term them debased floral ornaments.

<sup>&</sup>lt;sup>5</sup> Studi e Mat., II, pp. 126 ff. (Karo); MARSHALL, Nos. 1362-3, 1449, 1453.

lost. The best preserved is on the side shown in Pl. 46, Fig. 1. The drawings of the bowl which appeared in the *Monumenti* were more than usually inaccurate and suggest in no way the real character of the workmanship or the details. The pleasing head shown on our plate at least proves that the artistic qualities of the bowl have been too much disparaged.

- 66. Pl. 47, Fig. 1. Bronze bowl, smaller than No. 65, and with thicker walls, but apparently of only one layer. The height is 7.2 cm.; the inside diameter at the rim 14.2 cm. The only decoration consists of two parallel horizontal ridges surrounding the bowl just below the rim. The surface is much corroded, but the bowl is practically intact.
- 67. Pl. 47, Fig. 2. Shallow bronze bowl, with bulging vertically ribbed sides. Ht. about 5.6 cm.; diameter of the top 22 cm. The bowl has a flat bottom 11 cm. in diameter with a raised circular ridge at the edge. From this rises the ribbed bulging portion, of which the numerous vertical divisions surrounding the bowl have much the shape of sections of an orange. Above is an undecorated retreating portion, concave in section, terminating in the slightly flaring rim, in which are two small holes for suspension. This type of bowl was very common in the 7th century B. C. and many examples exist in other museums <sup>2</sup>.
- 68. Pl. 47, Fig. 3. Bronze bowl with flat bottom and flaring sides. Ht. 5.5 cm.; outside diameter of rim 18.5 cm. The flat base is 8.5 cm. in diameter and projects slightly beyond the straight flaring sides. Above is a flat projecting rim. The bowl is much corroded. It is formed of two layers of metal, and had no decoration.
- 69. Pl. 45, Fig. 3. Inner shell of No. 64. This is listed in the inventory as a "vase of oval form, very tall and perfectly smooth, of bronze". As shown above, it was not a separate vase, but formed the inner shell of No. 64. The present diameter is 12.6 cm. One rivet only remains of the four by means of which it was joined to No. 64.
- 70. Listed in the inventory as "fragments of bronze utensils with traces of gilding". Lacking further description it is now impossible to decide which of the bronze fragments were originally included under this number.
- 71. Pl. 48, Figs. 1, 2. Clasp<sup>3</sup> formed of two roughly modelled human male figures of bronze, with a hook which projects from the side of one of the

fragmentary specimens from the same tomb.

<sup>&</sup>lt;sup>1</sup> An. Inst., 1879, p. 15, Pl. C, 5; Montelius, II, B, Pl. 366, 11; Chron., p. 102. The bowl in Chron., Pl. LVI, 4, is not this one, but is from another tomb in Palestrina.

<sup>&</sup>lt;sup>2</sup> See No. 85 below for three similar but more

<sup>&</sup>lt;sup>3</sup> An. Inst., 1876, p. 251; Mon. Inst., X, Pl. XXXI a, 8 (the left-hand figure only); N. S., 1876, p. 87 (23); An. Inst., 1879, p. 14; Mon. Inst., XI, Pl. II, 13; MONTELIUS, II, B, Pl. 368, 3.

figures and engages in the bent arm of the other. The left-hand figure (Pl. 48, Fig. 1) is 7.8 cm. in height without the feet which are missing. The other is 8.4 cm. in height. They are very crudely modelled. The heads are mere triangular lumps, with the hair indicated by incised parallel lines down the back. The ears are marked only by slight depressions. For the features, a small projection indicates the nose and two indentations suffice for the eyes. The result gives more the appearance of apes than of men.

The feet are broken off except for the right foot of the right-hand figure. The legs are better modelled than the rest of the figures, especially from the knee down.

The left-hand figure has its right arm crooked at a sharp angle with the hand spread out flat on the hip. Attached to the elbow is a vertical bar, broken both above and below, showing that the clasp is now incomplete. The left arm is bent so as to leave a circular opening into which engages a heavy flat hook which projects from the right side of the right-hand figure. The right arm of this figure is indicated merely in relief as bent over on the breast. The left arm is bent as is the right arm of its companion, with the hand flat on the hip, but the elbow has been broken off, together probably with some object to which it was attached.

72. Pl. 48, Figs. 3, 4; Pl. 49; Pl. 50, Figs. 2, 3. Large tripod 1 of bronze and iron, supporting a bronze cauldron with human and animal figures looking in over the edge.

The tripod is formed of three bronze feet, from each of which spring one iron leg and two iron braces. A bronze ring with incised zig-zag lines surrounds the top of the legs and serves as support for the cauldron. The slender iron braces, six in number, cross in pairs just below the bronze ring, to which they are then attached. Where they cross they are covered with a bronze sheath which is ornamented with a raised diamond shaped ridge and with incised dotted circles. To give additional strength a projection from the upper side of the bronze sheath also joins the bronze ring.

The bronze feet (Pl. 50, Fig. 3), 12.5 cm. in height, have the form of the hoof and lower part of an animal's leg. At the back of each are two spur-like projections. The hoofs are cloven, and are ornamented with incised diagonal lines. Above on the foot are alternating horizontal lines and bands with incised herring bone pattern, to a point above the spurs. From thence to the top of the foot the decoration consists of broad horizontal bands on the back, with herring bone striations, and several narrow vertical bands in front, with alternating incised dotted circles and herring-bone decoration.

<sup>&</sup>lt;sup>1</sup> An. Inst., 1876, pp. 250 f.; Mon. Inst., X, Pl. XXXI a, 2, 2 a (the human head, reproduced on our Pl. 48, Fig. 4), 2 b; Bull. Inst., 1876, p. 125; N. S., 1876, pp. 87 (23), 286 (117); An. Inst., 1879, p. 15, Pl. C, 8; Dennis, II, p. 502; Montelius, II, B, Pl. 366, 9

a-d; Chron., p. 102, Pl. LV, 10; Helbig, II, p. 268, No. 1593; Furtwaengler, Olympia, IV, p. 127; Mon. Ant., VII, cols. 312 ff., and Fig. 9, from a photograph, (Savignoni).

The total height of the tripod with the cauldron is 63 cm. The cauldron alone is about 13 cm. in height and 23 cm. in diameter (outside) at the rim. It is made of one heavy sheet of metal with a slightly projecting rim, and has on the rounded under surface traces of what may have been an additional support, or may merely be corroded portions of some other object on which it rested while lying in the tomb.

Attached to the outside of the cauldron are three dogs (to give them a name), and three male figures, all of bronze, so placed that they appear to be looking over its edge into the interior. The dogs (Pl. 50, Fig. 2) are 6.6 cm. in height. The hind legs of each are attached to a much corroded metal strip projecting above one of the tripod legs. The forelegs are thrust into two holes bored in the cauldron itself just below the rim. They are very badly modelled. The eyes are indicated by small lumps, and the ears by slight projecting points. They have open mouths with a few vertical incisions on both the upper and lower jaw to indicate the teeth. Around the neck is a double incised line. The short tail is curled upward.

The male figures (Pl. 48, Figs. 3, 4) are 12.5 cm. in height. They appear to be nude except for a belt around the waist. They stand on the bronze ring and are attached to the cauldron by a rivet driven through their bodies between the arms. Their arms are raised as if to grasp the edge of the cauldron and their heads project over the rim. The heads are round and have merely slight incisions to indicate the features '. The ears are small lumps set far back. The hair is represented by deep parallel incised lines extending from the top of the forehead over the top of the head and down to the neck. The hands are very crudely modelled, with merely a few incisions to indicate the fingers. The belt around the waist is ornamented with an incised herring bone pattern.

Tall tripods with a light framework of this nature were probably derived from an early type made of twigs or metal, which could be folded up. Folding tables are found represented on Assyrian reliefs of the 8th century B. C.<sup>2</sup> as used by rulers in their campaigns, and in this connection it is especially interesting to find similar stands on the Phoenician bowl No. 25 from this same tomb <sup>3</sup>.

Tripods of similar form to the present example are of frequent occurrence 4. From their analogy one would expect to find additional braces near the feet. That no traces of these are now visible is due perhaps to the corroded condition.

<sup>&</sup>lt;sup>1</sup> See Pl. 48, Fig. 4, from the drawing in Mon. Inst., X, Pl. XXXI a, 2 a. I was not permitted to move the tripod so as to photograph the front of the figure and therefore in this one instance have reproduced the early drawing.

<sup>&</sup>lt;sup>2</sup> LAYARD, Monuments of Nineveh, London, 1853, Pls. 63, 77.

<sup>&</sup>lt;sup>3</sup> See above p. 41.

<sup>4</sup> See Savignoni, Mon. Ant., VII, cols. 312 ff.

73. Pl. 51, Figs. 1, 2. Bronze bowl with ornate handles. The height of the bowl is 11 cm.; the diameter of the top 32.5 cm. Attached to its rounded bottom on the outside is a bronze disk 9.5 cm. in diameter with a heavy bolt in the center which pierces the bottom of the bowl and is fastened by means of a round knob within.

Riveted to opposite sides of the bowl are two elaborate handles (one 9.7 cm., the other 10.4 cm. broad), formed of heavy bronze rods 1 cm. in diameter bent to form an arch with the ends pointing downward. They are attached to the bowl in such a manner that they stand at some distance from the side, to which they are joined by means of the ends which are bent at right angles, and by two projections. The bent ends and the projections pierce the side of the bowl and are fastened within by four rivets with spherical heads <sup>2</sup>.

On the center of the upper rounded portion of each handle is a floral ornament 8.2 cm. broad with two widely spreading drooping petals. At each side of this ornament is a bull's head with long horns.

- 74. Pl. 50, Fig. 1. Bronze bowl <sup>3</sup>, formed of an outer and inner shell, without decoration. The height is 10 cm.; the outside diameter of the rim, which is a trifle bent, varies between 24.7 and 25.2 cm. Near the rim on one side are two holes in one of which still remains a bit of wire. The bowl was found inside of cauldron No. 75 <sup>3</sup>.
- 75. Pls. 52-54. Crushed fragments of a very large hammered bronze cauldron 4 with two winged human figures of cast bronze, and six (originally) griffin heads of hammered bronze, attached near the rim on the outside. According to Helbig 5 it was found near the north-west corner of the tomb 6. Within it was bowl No. 74.

Of the cauldron there remains the much bent and very narrow rim, with portions of the bulging sides, and a pile of broken fragments. The greatest diameter of the twisted rim is 67 cm.; the least diameter 50 cm.

Attached to the cauldron on opposite sides are two human busts of cast bronze, each with the tail and outspread wings of a bird, and with human arms represented in relief stretched out along the backs of the wings (Pl. 52, Fig. 2). They are so placed

An. Inst., 1876, p. 252; Mon. Inst., X, Pl. XXXII, 4, 4 a (one handle only, with no indication that it belongs to a bowl); Helbig, II, p. 269, No. 1594; Furtwaengler, Olympia, IV, p. 146.

In the museum inventory it is difficult to decide to which bowl No. 73 refers. The wording for No. 73 is "simile di bronzo al. 0.11; diam. 0.25 ", which would seem to indicate that No. 74 should have come first, as the object before No. 73 is a tripod and not a bowl.

<sup>&</sup>lt;sup>2</sup> Represented in Mon. Inst., X, Pl. XXXII, 4 a. <sup>3</sup> An. Inst., 1879, p. 13; Mon. Inst., XI, Pl. II, 10, (cauldron No. 75 with bowl No. 74 inside).

<sup>&</sup>lt;sup>4</sup> Bull. Inst., 1876, p. 123; N. S., 1876, p. 85 (21); An. Inst., 1879, pp. 12 f.; Mon. Inst., XI, Pl. II, 10, 10 a-c; Montelius, II, B. Pl. 368, 1a, 1b, 2, (drawings of the attached figures); Helbig, II, p. 270, No. 1600; Furtwaengler, in Roscher, Lex., s. v. Gryps; also in Olympia, IV, p. 124 (the cauldron), p. 120 (the griffins), p. 117 (the winged figures); Poulsen, pp. 64 ff., (the winged figures). For the probable form see Mon. Ant., XIII, Fig. 25, cols. 249 f., (from Cumae).

<sup>&</sup>lt;sup>5</sup> Bull. Inst., 1876, p. 123.

<sup>&</sup>lt;sup>6</sup> At point *l* on Fig. 1, p. 13 above.

that the bottom of the bust rests on the rim of the cauldron. The outspread wings come just below the rim on the outside and are firmly riveted to the sides. Immediately below the head on the back of each figure is a small horizontally attached cylinder, evidently intended either to allow the cauldron to be suspended, or to facilitate its removal from the fire. The heads are well modelled and of pleasing appearance (Pl. 54, Fig. 1). The height from the bottom of the breast resting on the rim to the top of the head is 7.1 cm. The eyes have a circular raised pupil surrounded above and below by curved ridges which meet at acute angles at the sides. The treatment of the hair suggests the complicated "layer wig" head-dresses 1. It is modelled in considerable relief around the face and then falls in a larger swelling mass on the shoulders. The divisions however are not sharply marked but are indicated merely by faintly incised parallel lines of a generally diagonal trend. The rounded bust is ornamented with a zig-zag pattern formed of double incised parallel lines.

The wings and tail which, from the way the figure was attached, could only be seen from behind (Pl. 52, Fig. 2), are spread out to form a flat surface 20.5 cm. broad. The height from the bottom of the tail to the top of the head is 16.5 cm. The wings and the tail have a scalloped edge and are ornamented with a feather pattern formed of faintly incised lines. The arms, which are indicated in low relief stretched out along the wings, have little modelling. The hand is opened flat. The thumb is separate, but the fingers are indicated merely by incised lines 2. A semi-circular, raised, flat ridge extends downward from one elbow, surrounds the cylinder in the center of the back, and terminates at the elbow on the other side. From this ridge the wings and tail appear to radiate. Furtwängler 3 took it to represent the sun disk, and in connection with the wings found a reminiscence of the Assyrian symbol of the winged sun. With this theory Weicker 4 disagrees. More recently Poulsen 5 has discussed the subject and accepts Furtwängler's point of view. Certainly the circular portion does not seem an organic part of the bird body, and nevertheless in various forms it occurs in all the specimens. Numerous similar figures are known 6 from widely scattered sites. They are all so closely alike that some common place of origin seems certain.

The griffin heads and necks (Pl. 53) were originally six in number 7, although fragments of five only remain. The necks were attached by means of a flanged base to the bulging outer side of the cauldron at some distance below the rim. The heads

<sup>1</sup> Poulsen, Chapter XI.

<sup>&</sup>lt;sup>2</sup> See Poulsen, Figs. 27, 64; figures from Ephesus and Sparta with the hands flat against the sides.

<sup>&</sup>lt;sup>3</sup> Furtwaengler, Arch. Zeit., 1879, pp. 180 ff.; Kleine Schriften, I, pp. 336 ff.

<sup>4</sup> WEICKER, Der Seelenvogel, p. 95.

<sup>&</sup>lt;sup>5</sup> Poulsen, pp. 64 ff.

<sup>&</sup>lt;sup>6</sup> For references see Poulsen, p. 64.

<sup>&</sup>lt;sup>7</sup> This is made certain by the presence of six disks (to be described later) which were placed inside the cauldron to give additional strength to the sections where the griffin necks were attached.

faced the inside '. The entire figure, consisting of head, neck and base, was formed of a thin plate of metal beaten into shape over a previously prepared mould, probably of wood, and was then filled with a composition which appears to be a mixture of a bituminous and an earthy substance. Afterwards certain details were added by means of incised lines of which the impressions remain on the bituminous filling in the places where the bronze covering has been broken away.

The necks rise from an undecorated cylindrical base 10 cm. in diameter and 2 cm. in height, which was attached to the surface of the cauldron by a broad circular flange. At the top of the base 2 is a rounded ridge. Above this rises the broad (10 cm.) cylindrical neck which has practically no curve, a feature common to the early hammered types. The later cast specimens are more slender and tapering, and the curves are very marked.

The heads have short stumpy ears and a low cylindrical crest. The protruding eyes are filled with a whitish paste with the pupils indicated in dark blue. The eagle-like beak is wide open, with the tongue, slightly curled at the tip, in low relief on the lower jaw. The eyebrows are marked by incised lines and so is also the ridge outlining the upper portion of the mouth. Between the eyes are two rounded wart-like lumps. Surrounding the crest and extending down the back of the neck on either side is a double raised band with horizontal striations. As far as the corroded condition of the neck allows one to judge these bands were not continued on to the usual spiral endings. In places where the surface is better preserved 3 can be seen semi-circular incisions forming a scale pattern which probably covered originally all of the neck.

One of the six heads still remains attached to the cauldron, as can be seen on Pl. 52, Fig. 1. (The same head is shown on Pl. 53, Fig. 1). It was evidently found broken off and has been replaced, but apparently correctly 4. Fragments of four others of the heads are still preserved. Two of these are shown on Pl. 53. Fig. 2 (about  $^2/_3$  actual size) shows a large section of the earthy filling and two fragments of the top of one of the heads. Fig. 3 (about  $^5/_9$  actual size) and Fig. 4 ( $^7/_9$  actual size) are of the same fragment. In this example the lower part of the beak is missing, but nearly all of the upper portion of the head remains.

The flanged base seems never to have been detached, so it seems probable that the head has now its original direction, i. e. facing inward.

<sup>&</sup>lt;sup>1</sup> Furtwängler (Roscher, Lex., I, 2, col. 17651; Olymp., IV, p. 119) maintained that the heads originally faced out and that the restorer found the base of the only example which is now in place with the head detached, and replaced the head facing the wrong way, at the same time making the neck shorter than it was originally. A careful examination of the cauldron convinces me that the neck has been broken and pieced together, but correctly, as the line of the break is plainly visible.

<sup>&</sup>lt;sup>2</sup> In other examples (see Furtwaengler, Olympia, IV, pp. 121 ff.) the base is separate, but here there is no division.

<sup>&</sup>lt;sup>3</sup> Visible, for example, just below the lower jaw on Fig. 1, Pl. 53.

<sup>&</sup>lt;sup>4</sup> See p. 74, note 1.

To give additional strength to the sides of the cauldron at the point where the flanged bases of the griffin necks were attached, six circular bronze disks, each 10 cm. in diameter, were nailed to the inside surface 1. Two of these still remain in place 2. The other four, with attached pieces of the cauldron body, are now lying with the other fragments inside the rim. The presence of six disks offers convincing proof that the griffin heads were once six in number even though they have not all been preserved. Two of the disks are shown on Pl. 54. They all have a similar and most graceful ornamentation of incised rosettes of which the centers, and the ends of the petals, are raised in low relief. In the center of each disk is a small rosette, 8 mm. in diameter, of 12 petals. Near the rim are four others of the same size alternating with four which are much larger (3.4 cm. in diameter), of 13 petals. In addition, rows of tiny incised circles surround the small central rosette, the four larger ones, the rim of the disk and even the individual petals of the large rosettes. The disk shown on Pl. 54, Fig. 3 is still attached to a large fragment of the cauldron surface. On each side of the disk is a large round-headed rivet which served originally to fasten the projecting flange at the base of the griffin neck on the other side.

The entire cauldron was covered with a large piece of woven cloth at the time it was placed in the tomb. Traces of the fibre are still visible on many of the fragments and can be seen very well, for example, in Pl. 53, Fig. 2, on the bronze fragments of the griffin head.

76, 77. Pl. 55. Two similar, long, bronze supports <sup>3</sup>, or craticula. Each is formed of a flat strip of bronze 3 cm. wide and 64 cm. in length ornamented on the upper surface with three raised double parallel lines running the entire length. This strip rests at each end on a two-legged support formed of a strip of metal of the same size as in the long section, and with similar decoration. The supports are 12 cm. in height. They have a flat top, and two legs which curve gradually outward. The long bar projects over the support at either end. Attached to the under surface of this projection is a small ring from which hangs a larger ring 5 cm. in diameter (outside). From each end of the long bar projects a piece of heavy wire bent upward into the shape of a letter S, and ending in a flattened portion the shape of a duck's bill.

# 78. Pl. 56, Fig. 1. Bronze tripod 4 consisting of a small cauldron with three

is difficult to decide.

<sup>&</sup>lt;sup>1</sup> Furtwängler (Olymp., IV, p. 124) noticed one of these and refers to it in his description of four rings (originally 8) on a fragmentary cauldron from Olympia, evidently placed there to give additional support to griffin heads which were once attached to the outside but have now disappeared.

One of these has a piece of gold foil still adhering, but whether this was a part of its original decoration or merely results from contact with some other object it

<sup>&</sup>lt;sup>3</sup> Ant. Inst., 1879, p. 15, Pl. C, 4; Montelius, II, B, Pl. 366, 17; Chron., p. 101, Pl. XLIII, 8; DAREMBERG et SAGLIO, s. v. Craticulum, p. 1557, Fig. 2051; Helbig, II, p. 269, No. 1597. For similar specimens in the Vatican see Helbig, I, p. 374, No. 656.

<sup>&</sup>lt;sup>4</sup> An. Inst., 1879, p. 15, Pl. C, 7, 7a; Montelius, II, B, Pl. 366, 16; Chron., p. 102, Pl. LV, 2; Helbig, II, p. 269, No. 1598.

flat strips of bronze attached as legs. The cauldron is formed of an outer and inner shell with a slightly projecting rim, and has no ornamentation. It is 38.5 cm. in diameter at the rim, and is about 15 cm. in height. With the legs the tripod is 33 cm. high. The legs are made of flat strips of bronze 3.6 cm. in width. At the top each leg is bent over at right angles and this projection, together with another of similar shape somewhat below, is attached to a bronze plate 10 cm. broad which is placed just below the rim of the cauldron. In the space between the two projections at the top of each leg is a long round rivet which passes through the leg, the bronze plate, and the side of the cauldron. On the inside of the cauldron is visible the head of the rivet surrounded by the heads of four others 1 by means of which the bronze plate was attached.

79. Pl. 57. Large bronze situla 2 with cover and two handles. The height is 44.5 cm.; the diameter of the top is 36 cm. The situla has a gently flaring body with a retreating rim. The sides are formed of three separate sections riveted together in cylindrical form by three vertical rows of rivets. The bottom is a separate piece which is bent over the lower edge of the sections forming the sides and is fastened to them by a horizontal row of rivets extending around the base. The rivet heads have been carefully hammered flat and blend so well with the surface that the dividing lines are hardly noticeable.

The tall strap handles are two in number. Each is formed of a strip of bronze 5.4 cm. broad of which one end is attached by means of six rivets to the bulging side of the situla and the other is fastened to the inside of the rim.

The cover (Pl. 57, Fig. 2) is formed of two layers of which the one below is thick and is slightly smaller in diameter than the top of the situla. The upper layer is thin and broader (38.4 cm.) and rests on the rim. It has two notches on opposite sides corresponding to the handles. The two layers are fastened together by numerous tiny rivets which are visible even in the photograph. (Pl. 57, Fig. 2). In the center of the cover is a small handle 4.9 cm. in height formed of a piece of heavy wire 8 mm. in diameter. Around the edge of the cover are two raised parallel concentric lines, continuous except that the outermost is inset slightly on opposite sides to follow the outline of the notch for the handle. Corresponding to one of the handle notches is an additional ornament resting on the inside edge of the inner circular line. This ornament is 5.1 cm. broad at the base, and 3.7 cm. in height. It is formed of five short sections of radial lines which if prolonged would meet at the center. On these rest two parallel horizontal lines connected at the sides by prolongations of the outer radial lines. It is difficult to

from a good photograph and described by GHIRARDINI, Mon. Ant., II, col. 206, Fig. 6. An inaccurate drawing from this photograph is in MONTELIUS, II, B, Pl. 366, 18.

<sup>&</sup>lt;sup>1</sup> The arrangement of the rivets is reproduced in the drawing in An. Inst., 1879, Pl. C, 7 a.

<sup>&</sup>lt;sup>2</sup> Not mentioned in the early reports. Reproduced

explain the meaning of this decoration, unless possibly the cover was hinged on the opposite side, and the ornament was meant to show on which side it should be raised.

- 80. Pl. 56, Fig. 2. Large hammered bronze cauldron, of which the bottom is now missing. The (outside) diameter of the top is 36.5 cm. The cauldron was formed of a single layer of metal gradually thickening toward the top where it ends in a rim 1 cm. broad. There was no decoration.
- 81. Pls. 58, 59. Tall conical bronze stand with flaring covered top. The stand is formed of a thin sheet of bronze with the ornamentation in low relief. The height is 91 cm. The diameter of the top is 31 cm.; that of the base 38 cm. In shape it is conical with gradually diminishing diameter to a point 65 cm. above the base. The flaring top is separated from the lower conical portion by a broad torus moulding. Above this moulding is a frieze of much stylized Uraeus serpents in two rows. They are so debased in form that those in the outer row have become mere flat raised strips with rounded tops, while those in the back row are represented merely by rounded lumps which fill the spaces between the heads of those in the outer row.

Above this frieze is a row of leaves overhanging from the top of the stand. These too are simply rounded protuberances, but are evidently intended to suggest the Egyptian palm leaf capital. Covering the top of the stand is a flat <sup>3</sup> sheet of bronze which is bent over the edge and fastened.

Below the torus moulding is a broad band of lotus decoration with alternating buds and flowers pointing downward. The remaining space below is occupied by two groups each with two winged horses in the so-called "greeting" attitude. They stand facing on their hind legs and stretch out their fore legs until they almost touch. Their wings hang down, one in front and one behind. A floral ornament, resembling the lotus flower above, projects from below their heads. The entire background from the base up to the lotus frieze is formed of gradually retreating layers 3 to 4 cm. in height giving the effect of the sides of a folding drinking cup.

# 82. Pls. 60, 61. Fragments of a large bronze shield 4 with numerous

the circumstances.

<sup>&</sup>lt;sup>1</sup> An. Inst., 1879, pp. 9 ff.; Mon. Inst., XI, Pl. II, 7; Montelius, II, B, Pl. 367, a, b; Chron., pp. 101 f., Fig. 249; Helbig, II, pp. 269 f., No. 1599; Furtwaengler, Olympia, IV, p. 125; Mon. Ant., XIII, col. 252; Boll. d'Arte, 1909, p. 182; Poulsen, pp. 122 f., Figs. 129, 130 (from the early inaccurate drawing), Fig. 131 (from a photograph).

<sup>&</sup>lt;sup>2</sup> As I was not permitted to move the stand from its present position the following description is based merely upon such examination as was possible under

<sup>&</sup>lt;sup>3</sup> Not concave, as stated in An. Inst., 1879, p. 9, and copied by all but Furtwängler who makes the statement (Olympia, IV, p. 125) that no top plate was to be seen, thus giving an erroneous impression. It is still in place, but as the stand is placed on a high shelf of course the top cannot be seen without some effort.

<sup>&</sup>lt;sup>4</sup> Bull. Inst., 1876, pp. 124, 130; N. S., 1876, p. 87 (23).

bands of ornament in relief! According to Helbig 2 fragments of three shields were found near the south-west corner of the tomb and of a fourth in the north-west corner 3. Possibly some fragments have been lost, or else the present reconstruction includes portions of several shields. At any rate the pieces shown on Pl. 60, Fig. 2 are all that now remain, with the exception of the small fragments attached to the tubular shield handles No. 84 (see below).

The group of remaining fragments, forming less than a quarter of one shield, has been mounted on a card, as shown on Pl. 60, Fig. 2. The diameter according to the present arrangement would have been about 1 m. In the center is a raised circular section (Pl. 60, Fig. 1) 8 cm. in diameter, ornamented in the center with several concentric circles from which radiate groups of four slightly diverging lines. Surrounding this central ornament are 21 concentric rows of decoration, of which eight have human or animal figures, alternating with rows of small bosses or of very fine radiating lines. One row (the next to the outer) 4 cm. broad, has a guilloche band.

Of the innermost row with winged animals (Pl. 60, Fig. 1) hardly a trace remains. Immediately adjoining this is a row of feline animals (Pl. 60, Fig. 1) with open mouths and upraised tails, running to the right. Traces of nine of these remain. Next follow several fragmentary rows of dots and radial lines and then come three rows of human and animal figures (Pl. 61, Fig. 1) with no intervening decoration except a raised line. In the outermost and innermost of these three rows are men on horseback proceeding to the right. The men appear to be nude. The horses have feather-like tails reminding one of those on the silver bowls. The row between has very crudely modelled birds with long bills and legs stretched out in front. At the first glance they appear to be quadrupeds but a close inspection reveals the diagonal incisions which mark the broad wings and narrower tails.

Following these rows are several bands of decoration and then a row of clumsy human figures (Pl. 61, Fig. 2) with the left arm and leg raised, much like dancing bears. The next row has figures on horseback as on Pl. 61, Fig. 1, after which is the guilloche band and then a row of small bosses at the edge of the shield.

Of the handle which was once fitted to the back of the shield no trace remains. It doubtless resembled those described below under No. 84, and might have been the one shown on Pl. 62, Fig. 6, although there is no definite proof.

<sup>&</sup>lt;sup>1</sup> For similar examples of the same period see Museo Etrusco, I, Pls. IX-XI (Vatican); Montelius, II, B, Pl. 327, 13 (Museo di Villa Giulia); Falchi, pp. 118 ff.; N. S., 1887, Pl. 14, 2 (Vetulonia); Montelius, II, B, Pl. 376, 6 (now in Karlsruhe); Mon. Ant., XIII, cols. 246 f., Fig. 24 (Cumae); Mus. It. di Ant. Class., II, 1886, pp. 98 ff.

<sup>&</sup>lt;sup>2</sup> Bull. Inst., 1876, pp. 124, 130. As this mentions the row of crude human figures as on the fragments from the south-west corner, doubtless the existing pieces came from that location.

<sup>&</sup>lt;sup>3</sup> On account of their proximity to the walls, Helbig conjectured (*Bull. Inst.*, 1876, p. 124) that they were once suspended on nails.

This and the similar shields from other tombs 1 were formed of a single thin sheet of bronze, probably with no additional lining or support, and were merely imitations to be placed in the tomb and were never intended for use. The majority of them had a handle, either tubular (as No. 84 below), or formed of a flat strip of metal, which was attached to the center of the back of the shield by means of three conical-headed rivets at each end. The six rivet heads, or the holes where they once were, appear on the front of almost all of the shields, three on either side of the large central ornament, and show that the handle once existed, even though in many of the specimens it has disappeared. In the present example even the sections where the handle was once attached have been lost.

- 83. Pl. 62, Fig. 7. Bronze lance head 2 with blade and haft in one piece. The haft is hollow and tapers toward the blade. The blade consists of a flat section in the shape of a laurel leaf which projects on either side of a tapering curved portion which is really a prolongation of the haft. The point of the blade is broken. At the blade end of the haft is a small hole on one side. At the shaft end are two small projections on opposite sides on the same axis as the blade. Inside the hollow tube of the haft are traces of wood. The length as it stands is 35.5 cm.; that of the haft alone is 13.3 cm.
- 84. Pl. 62, Figs. 5, 6. Two bronze handles for votive shields, with a few small fragments of the shields attached. Each consists of a thin sheet of bronze rolled to form a tube 3 cm. in diameter with overlapping sides. At each end was originally a T-shaped projection formed of a continuation of the same strip of metal 3.5 cm. in width where it adjoins the tube, and 9 cm. wide at the broad end. Only one of these now remains on each tube. They were bent upward, and the broad end was riveted to the under side of the shield with three conical-headed rivets. The tubular portion formed the grip for the hand and the projecting portions at each end were long enough to separate the tube from the inner surface of the shield for a sufficient distance to admit the insertion of the fingers. The tubes have nail holes at each end showing that the overlapping sides were fastened together, probably over a wooden core. The handle shown on Pl. 62, Fig. 6 has two of the rivets remaining. The other (Pl. 62, Fig. 5) has all three rivets, and also a small fragment of the shield with traces of three of the rows of decoration, a row of bosses and a row of radiating lines, exactly as on No. 82, with between them a row with a palmette which resembles quite closely one of the ornaments on the Karlsruhe shield 3.

<sup>&</sup>lt;sup>1</sup> For references see the note at the beginning of this description.

<sup>&</sup>lt;sup>2</sup> Reproduced in Montellus, II, B, Pl. 369, 9, by

a restored drawing.

<sup>&</sup>lt;sup>3</sup> Montelius, II, B, Pl. 376, 6.

That these objects have not been recognized as shield handles is due to their fragility and their careless construction. It must be remembered however that the shields were of light weight and were not intended for use, but merely to be placed in the tomb, and that a simple handle was sufficient. Just how closely the handles of the shields from other tombs resemble these cannot be told without a special inspection, as the reports do not always give enough detail. In the reproductions of almost all of them may be seen the three rivets, or the holes for the same, on either side of the central ornament. The Florence example, to judge from the description of Falchi<sup>2</sup>, has a tubular handle. The Cumae example has a rectangular strip attached by three rivets at each end<sup>3</sup>. In the Museo di Villa Giulia is a shield from the recent excavations at Veii with a tubular handle still attached.

- 85. Fragments of three bronze bowls. They are very much broken, and are of the same type as No. 67, so it has not seemed worth while to photograph or measure them.
- 86. Pl. 62, Figs. 1-4. Four heavy rings of solid bronze with a cross-bar somewhat to one side of the center. They vary from 5 to 8.5 cm. in diameter. Similar rings occur elsewhere in tombs of this period 4. They probably formed part of horse trappings.
- On Pl. 71, Figs. 2, 3, are two much corroded rings 6.3 cm. in diameter, from the storeroom. Attached to Fig. 3 is a still smaller ring.
- 87. Pl. 63, Figs. 1–12. Group of 9 very slender bronze handles 9 to 10 cm. broad, and several fragments of a riveted section to which they were attached. They were probably handles for a type of bronze jar more or less imitative of Villanova prototypes, with a wide swelling body and tall neck 5. The body of the jar consisted of an upper and a lower section riveted together by a horizontal row of conical-headed rivets quite close together. The two slender handles were attached one on each side of the jar by six of the same rivets which fastened the plates (three on each side of the handle). The walls of the jars were very thin and have crumbled away, but the stronger riveted portion and the handles remain. If each jar had but two handles the tomb must have contained a large number of similar examples.

The long fragment on Pl. 63, Fig. 1 had a handle attached at the two points

<sup>&</sup>lt;sup>1</sup> For references see p. 78, note 1.

<sup>&</sup>lt;sup>2</sup> Falchi, p. 120.

<sup>&</sup>lt;sup>3</sup> Mon. Ant., XIII, col. 246.

<sup>&</sup>lt;sup>4</sup> See Falchi, Pls. IX, 7, 20; XV, 19.

<sup>&</sup>lt;sup>5</sup> For entire examples see Montelius, II, B, Pls. 281, 26; 289, 7; 294, 11. For an example from the Regolini-Galassi Tomb with round bottom, see *Mus. Greg.*, Pl. XIII, 11; Montelius, II, B, Pl. 336, 1.

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where the rivet heads have been broken off. Traces of it remain around the base of the second rivet to the left.

In addition to the fragments shown on Pl. 63, a number of others less well preserved are in the case in the museum. The inventory mentions fragments of 13 bronze jars or "cauldrons".

- 88. Pl. 63, Figs. 13-15. Fragments of animal teeth, probably used as amulets. The inventory mentions an "amulet (?) within a small bronze receptacle of which a trace of the base is left". This probably refers to the two fragments shown in Figs. 14 and 15, 3.8 cm. in length. At present no trace of the bronze case remains. Fig. 13 is a fragment of a curved tooth 3.8 cm. in length, with a hole for suspension bored near the point.
- 89. Pl. 63, Figs. 16, 17. Two iron implements. The one shown in Fig. 16 is a hatchet 21 cm. long and 8.5 broad. At the smaller end is a transverse oval hole for the handle. The hatchet is so corroded it is difficult to make out the original form. At one point is a smooth surface where it rested against the side of bowl No. 24, in which position it was found. According to the inventory the impression of one of the bulls which decorate the bowl could once be seen on the iron. At present it is difficult to distinguish, but a trace of one of the ornamental bands of the bowl is visible.

The object shown in Fig. 17 (22 cm. in length) has more the form of an axe. It has a small longitudinal hole in the smaller end for hafting.

In the same case with the above described implements are a number of iron fragments of which the majority are so badly corroded that the original form cannot be determined. A selection of the best preserved pieces is shown on Pl. 64, as follows:

Figs. 1-3. Iron rods with transverse pieces near one end. The one shown in Fig. 1 is 70 cm. in length.

Fig. 4. Fragment 14 cm. long, possibly of a bowl.

Fig. 5. Tube 10 cm. in length, marked with horizontal striations.

Fig. 6. Fragment of strigil, 14.5 cm. long,

Figs. 7-9. Groups of much corroded fragments among which can be distinguished several lance heads. The best preserved are shown in Fig. 8, (length 50.5 cm.). Portions of three lances can be seen in this group of which the handle of the best preserved is 2.35 cm. in diameter. The ribbed blade is 5.3 cm. broad. Fig. 9 comprises fragments of four lances which are less well preserved than those in Fig. 8.

Fig. 10. Fragment, 13 cm. long. It was apparently attached to some other object by means of heavy rivets.

<sup>1</sup> For a similar form see Montellus, II, B, Pl. 121, 27.

Figs. 11, 12. Groups of corroded fragments of lance heads etc.

The inventory in the museum ends with No. 89, but inasmuch as there are a few other objects which it does not include, these will now be described and for the sake of convenience given consecutive numbers, commencing with No. 90.

90. Pl. 65. One of two bronze sheaths 1 for the corner of a wooden framework, probably a funeral couch. Each is formed of two hollow bronze tubes crossing and fused together at right angles near their gradually tapering ends, and terminating beyond the crossing in the foreparts of some feline animal, whether panthers or lions is uncertain, but which for the sake of convenience will be termed lions. The hollow tubes still have traces within of the wooden framework. On the upper side of the tubes stand several very crudely modelled human or animal figures, held fast by projecting pegs which pass through corresponding holes in the upper side of the tubes. On the under side of each tube is a row of small irregularly spaced holes.

The outside diameter of the tubes of No. 90 (Pl. 65) at the larger ends is 3.3 cm. Near these ends the tubes are surrounded by six parallel grooves in groups of three. The length of the tubes including the projecting heads is 22 and 23.3 cm. respectively. The lions' heads and forequarters in which the tubes terminate are very roughly modelled. They have long ears, mere rounded lumps for eyes, and huge wide-open mouths with projecting teeth. Hanging from their mouths are much corroded traces of human figures. The one on the right (Pl. 65, Fig. 1) is the better preserved. Here the victim hangs upside down. The legs project to the right and left from the open mouth. The arms are raised upward and the head hangs down between the upraised forelegs of the lion. Of the other human figure but few traces remain.

Over the center of the crossing of the tubes stands a male human figure 9 cm. in height, so much corroded that few details are distinguishable. It is apparently nude, and was certainly very poorly modelled. Its right hand is raised, its left is extended forward and holds some unrecognizable object. The face has been destroyed by the corrosion. The hair is indicated by a flat mass extending down the back of the head to below the shoulders and marked with vertical lines. The most interesting feature connected with this figure is the spreading crown of 7 (originally 8) plumes which it wears. The

west corner of the trench, while the human figures were found at points labelled o near the east wall of the tomb. They all appear to belong together and are so exhibited in the museum, but without more complete records of the finding circumstances, it is impossible to be certain that in every detail they correspond to the original arrangement.

<sup>&</sup>lt;sup>1</sup> An. Inst., 1876, p. 251; Bull. Inst., 1876, pp. 123 f., 130; Mon. Inst., X, Pl. XXXI a, 9-11 (3 of the human figures); N. S., 1876, pp. 87 (23), 286 f. (117 f.); Montelius, II, B, Pl. 369, 2-4; Chron., Pl. LI, 24, 25; Dennis, II, p. 502; Helbig, II, p. 269, No. 1596. According to Helbig (Bull. Inst., 1876, p. 123) the sheaths were found at point f on the plan (Fig. 1, p. 13 above), at some distance from the north-

separate divisions of this crown are not lotus petals, as has been suggested <sup>1</sup>. Such petals are represented with the ends bent downward. Even in the present corroded state they suggest nothing so much as tufts of feathers, and one is at once reminded of the feather crowns so frequently seen on Eastern and especially Syrian reliefs of this period <sup>2</sup>. From the presence of this and the other Eastern motives described below, such as the centaur with human legs and with the Syrian "spiral" lock of hair with curling end, and the lions with human beings in their mouths, it would seem that the sheaths were of Eastern origin or else were made by workmen with oriental training.

To the right and left of the central figure once stood two centaurs. That to the right (from the point of view of the observer) has disappeared, leaving only the holes for attaching. Of the other, the human body and head has been broken off, leaving only the animal body with human forelegs. It faces away from the central figure. Facing it, near the end of the tube, is another human figure with a feather crown 3, about 8.3 cm. in height. This figure is in the archaic running attitude with the right knee on the ground and the left leg stretched out in front with the foot on the ground. The right fore-arm is outstretched, but the hand has been broken off. On the arm above the elbow is a raised band or ring. The left hand is extended to rest on the left knee. The head has some traces of modelling, with a recognizeable nose and with grooves above to suggest the eyes and eye-brows.

The corresponding figure 4 at the end of the other tube (to the right of the observer) is another centaur 8 cm. in height. The human fore-legs have been broken off, but it is still supported by the animal hind-legs. It has a human body and head. The right arm is stretched out in front. The head is triangular in shape, reminding one of the heads on clasp No. 71 (Pl. 48, Figs. 1, 2), which must be a work of the same "school". The face has little modelling. The nose is a mere lump. The hair falls in a mass down the back. On the head is a four petalled floral ornament of which the petals have the normal form with bent over points, quite different from the plumes of the feather crowns 5.

<sup>1</sup> Karo, Bull. Pal. It., XXIV, 1898, p. 154.

<sup>&</sup>lt;sup>2</sup> See Perrot, II, Fig. 238; III, Fig. 566; Jahresh. d. Oest. Arch. Inst., 1909, p. 34 (Helbig); Jahrb., 1911, pp. 230 f., (Poulsen); Marshall, No. 762.

Mon. Inst., X, Pl. XXXI a, 10; Montelius, II,

B, Pl. 369, 3; Chron., Pl. LI, 24.

<sup>4</sup> Mon. Inst., X, Pl. XXX a, 11; Montelius, II,

B, Pl. 369, 4; Chron., Pl. LI, 25.

<sup>&</sup>lt;sup>5</sup> In connection with these two types of head-dresses might be noted several similarities among the objects from Vetulonia. In addition to a number of floral ornaments resembling the head-dress of the centaur just

described (see FALCHI, Pls. IX, 21; XVI, 9) there is a human figure (FALCHI, Pl. XIV, 2) with a roughly modelled triangular head, on which is a crown with out-spreading rays which are bent slightly upward. This Karo (Bull. Pal. It., XXIV, 1898, p. 154) describes as a lotus flower similar to the others. The points however are not bent over and it seems more reasonable to consider it another attempt to represent a feather crown.

See also RIDDER, Cat. des bronzes trouvés sur l'Acropole d'Athènes, Figs. 334-337 for other heads crowned with floral ornaments.

91. Pl. 66. Bronze sheath, similar in size and construction to No. 90, but with different attached figures on the upper side. The projecting fore-parts of lions are much as in No. 90, and the human figures in their mouths are equally corroded and unrecognizeable.

At the intersection of the tubes stands a very crudely modelled feline animal, 8.5 cm. in height. The head is over large, and has large erect ears. The tongue hangs out from the open mouth. The long hanging tail is curled up at the end.

Facing this animal on each side are two nude male human figures wearing feather crowns. The one to the left (from the point of view of the observer) has its elbows pressed against its sides with the forearms stretched out in front. The other figure 'clutches an elongated object, possibly a sword, in its right hand, and some unrecognizeable object in its left.

Behind these two figures and facing them, on the ends of the tubes, are two centaurs. Their tails are curled up on their backs. The head of the one to the left faces forward. The head of the other is turned sidewise and faces away from the left side of the body. The heads have the same triangular form, with little modelling to indicate the features, which occurs in the case of the two figures forming clasp No. 71. Hanging down from the back of each head is a long lock of hair with curling end. This treatment of the hair is a common feature on Syrian figures of the period <sup>2</sup> and offers additional reason for suspecting that the sheaths were of foreign origin. The coarse execution is not against such a supposition, as is shown by the examples of inferior workmanship amongst the finds from many an Eastern site <sup>3</sup>.

92, 93. Pl. 67, Figs. 1-4. Two crouching feline animals <sup>4</sup> of bronze, intended to serve as sheaths for the ends of wooden bars. They are modelled with little regard for the real animal form, with over-slender body and disproportionally large fore-quarters and heads. The tails were curled up and over in spiral form above the body. (The tail of No. 93 has been broken off). The head has the same long erect ears, round lumps for eyes and over-broad and swelling nose that characterize the animals on the crossed tubes Nos. 90, 91. The mouth is open and the tongue hangs out. The body is hollow and has an opening behind and below into which was once inserted the end of a wooden bar. They probably formed part of a couch or other furniture for the tomb, with a framework of wood.

<sup>&</sup>lt;sup>1</sup> Mon. Inst., X, Pl. XXXI a, 9; Montelius, II, B, Pl. 369, 2.

<sup>&</sup>lt;sup>2</sup> See Poulsen, pp. 43 f.; Furtwaengler, Olympia, IV, p. 99, No. 692; Perrot, IV, Figs. 278, 327; Garstand, Land of the Hittites, Pl. LXXV.

<sup>&</sup>lt;sup>3</sup> See Mon. Ant., VII, col. 314 (Savignoni).

<sup>&</sup>lt;sup>4</sup> An. Inst., 1876, p. 252; Mon. Inst., X, Pl. XXXII, 2; Montelius, II, B, Pl. 366, 13; Helbig, II, p. 269, No. 1596.

The legs are little more than flat strips of metal with some modelling above to indicate the claws. They rested on the wooden bar. Between the fore legs was left a strip of bronze with a projecting peg below by means of which the figure was attached to the bar. Another peg is inside each of the animals, projecting down from the center of the back. The hind legs curve slightly outward to follow the shape of the bar over which they were fitted. The length of No. 92 (the one with the complete tail) is 8.7 cm. The height to the top of the ears is 9.35 cm. The length of No. 93 is 8.4 cm.; the height 9.2 cm. On Pl. 67, Figs. 1 and 2 represent No. 92 from the side and back. Figs. 3 and 4 show No. 93 from the under side and the front.

94, 95. Pl. 67, Figs. 5, 6; Pl. 68. Two bronze corner sheaths 1, with projecting animal body. These sheaths are of a different type from the other two varieties just described. The ends of two wooden bars, still well preserved, meet at right angles and are dovetailed together (See Pl. 68, Fig. 5). The dovetailed portion was inserted into the opening in the back of the sheath in such a manner that one of the bars extends straight out behind, and the other projects from the side corresponding to the back of the animal. Each sheath is securely fastened to the wooden framework by means of two square bronze pins with large spherical heads 1.2 cm. in diameter. These heads appear in high relief on the flanks of the animals.

The animals are of a different type from those described above. Their hind-quarters, 6.2 cm. in height, which form the sheaths, are over-large and have little resemblance to animal forms. From them project the tubular bodies with the head and fore-quarters turned to one side as if the animal were reclining. No. 94 (Pl. 67, Figs. 5, 6; Pl. 68, Figs. 1, 2), the better preserved of the two, turns its head to its right; No. 95 (Pl. 68, Figs. 3-5) to the left. The fore legs of No. 95 have been broken off. The fore legs (see No. 94) are too short and have little modelling. The head has small ears (not the long erect ears of the other specimens) and round hollow eyes with a filling of white paste to mark the iris, and a small hole in the center which once held a colored pupil. The mouth is large and open with two projecting teeth indicated above, and two below.

In addition to the numbered specimens, there remain on the museum shelves or in the storeroom a number of unimportant fragments of which the majority are represented on Plates 69-71, as follows:

Pl. 69.

Fig. 1. Apparently part of the rim of a large wooden receptacle. Length 8.5 cm.

An. Inst., 1879, p. 15, Pl. C, 6; HELBIG, II, p. 269, No. 1596.

- Fig. 2. Another portion of the rim, 12 cm. long.
- Fig. 3. Slightly curved wooden fragment 14.5 cm. long. It is ribbed longitudinally.
- Fig. 5. Round and tapering wooden fragment resembling the head of a club, 14 cm. long and 5.7 cm. in diameter. Extending along opposite sides and across the larger end is a double row of bronze nails.
- Fig. 7. Cylindrical piece of wood 13.8 cm. in length, perforated in several places. It probably formed the core for a bronze tube similar to those of Nos. 90, 91.
- Fig. 8. Axe-shaped fragment of wood, pierced by a bronze nail.
- Fig. 10. One of a number of similar glass fragments from the storeroom. They are not mentioned in the excavation records.
- Figs. 11, 12. Two animal bones from the storeroom.

#### Pl. 70.

Figs. 1-3. Bronze fragments, probably forming part of horses' trappings. Figs. 1 and 3 are formed of solid rods 0.6 cm. in diameter bent into spiral form. In the center the ends are bent outward at right angles to the plane of the spirals, and terminated in knobs, of which one remains. Two broken projections on the outer edge of each spiral show that the ornament is incomplete. Fig. 2 is T-shaped. The top bar is round, 4.5 cm. in length. The other section is flat.

The remaining fragments, all of bronze, on Pl. 70, are from the storeroom.

- Figs. 6-16. Parts of trappings similar to those shown on Figs. 1-3.
- Figs. 5, 20, 21. Portions of bronze clasps similar to those described under Nos. 3-6 and 12-15 in the catalogue above.
- Fig. 5. A fragment 6.4 cm. in length. There remains a portion of the flat plate. Attached to one corner is one end of the wire which ran parallel to it. The fringe-like hooks of the other (now missing) section of the clasp engaged in the space between the wire and the flat plate.
- Fig. 20. A longer fragment (12.2 cm.) of a similar clasp with portions of the wire fringe still adhering. The plate is pierced by a double row of holes.
- Fig. 21. A fragment 14 cm. in length, apparently of a different type of clasp, with three oval links of wire which served as eyes for the corresponding hooks on the other sections of the clasp. Traces of two of the hooks remain.
- Fig. 17. Fragment of the rim of a bronze bowl 18 cm. in diameter. The bowl was of the same type as Nos. 64 and 65, and was ornamented in the same manner with heads in high relief. Traces of the upper portion of three heads remain.
- Fig. 18. A bronze handle of the form of those shown on Pl. 33, Figs. 1-12.

Fig. 19. A bent fragment of bronze ending in a flattened portion. It resembles the bent wires in which terminate the long bars of the two craticula Nos. 76, 77.

## Pl. 71.

- Figs. 1, 4, 7 reproduce fragments of some object or objects, apparently of leather. They are extremely light in weight and are in a very friable condition.
- Fig. 1. Fragment of leather with a button of the same material in the center. Greatest diameter 6.3 cm.
- Fig. 4. Several interlacing leather straps about 2.8 cm. broad, with one double between two single pieces. They are held together by means of a bronze rivet which is attached to a flat strip of bronze at one end, and to a square washer at the other.
- Fig. 7. Fragment of some woven object, apparently of leather, studded with silver headed nails. Within are traces of wood. The length at present is 9.5 cm. One side (the base?) is flat and about 3 cm. in diameter.
- Figs. 5, 6, 8, 9. Bronze fragments, which, to judge from their curved surface, may have formed part of greaves 1. The one shown in Fig. 6 is 9.4 × 9.8 cm. in size. Fig. 8 is 9.4 cm. long. It has a row of rivets along one edge.
- Fig. 10. A mass of fragments of wood and iron interspersed with bits of gold foil. It is in the storeroom.
- Fig. 11. A flat strip of bronze on which rests a mass of woven material. It may have formed part of cauldron No. 75. It is now in the storeroom.

For Figs. 2 and 3 see p. 80.

This completes the list of objects from the Bernardini Tomb, with the exception of a few tiny fragments, too unimportant to warrant being photographed, which are exhibited in a small saucer in the museum. They were not placed with the other specimens until the year 1897, or shortly before. They are mentioned in the Notizie degli Scavi for 1897 (p. 256, note 1), with the implication that they remained behind in the Palazzo Wedekind in the Piazza Colonna at the time when the collection was transferred to the museum.

The fragments consist merely of three bits of gold, apparently portions of clasps; two tiny fragments of egg-shell bucchero; and one human bone, a phalanx from the left hand. If they really came from the tomb, the bone would substantiate the uncertain excavation reports which allude to human bones, although none were seen by Helbig when he examined the site <sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Karo in his article on Ocrea (DAREMBERG et SA-GLIO 5. v.) states that greaves are not found in Etruscan tombs of the 7th century. He is right in saying that there were none in the Tomba del Duce, but examples occur

in other tombs from Vetulonia of the same period. See FALCHI, Pls. XIII, 15; XIV, 8.

<sup>2</sup> Bull. Inst., 1876, p. 119.

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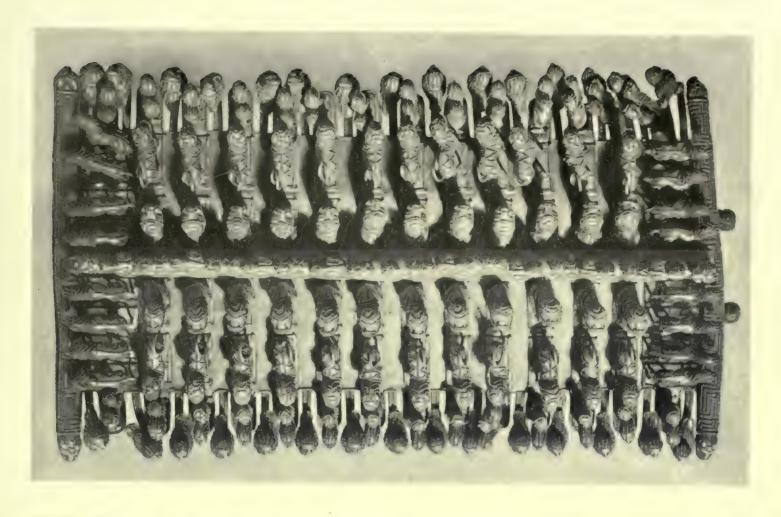
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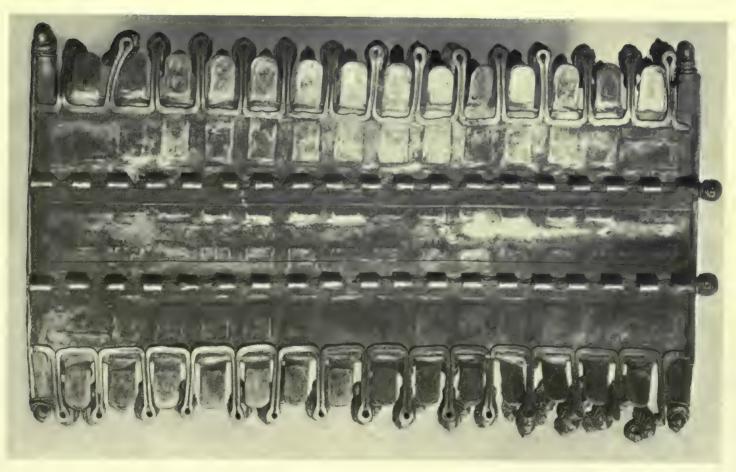
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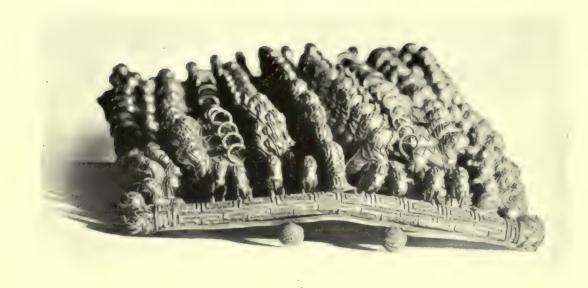
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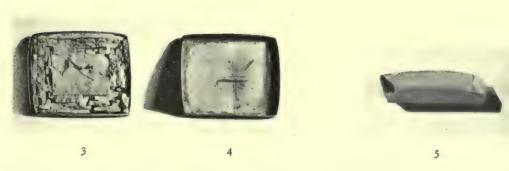


Gold plaque No. 1, front and back.









1, Gold plaque No. 1, from end. 2, No. 1, from side. 3-5, Gold trays Nos. 7 and 8. (See p. 26).







CIO CO

3 (11:12)



4 (11:12)



1, 2, Gold serpentine fibula No. 2. 3, 4, Gold fibula No. 2 B, with "Manios" inscription.

5, Sheath of No. 2 B, enlarged. (See p. 21).







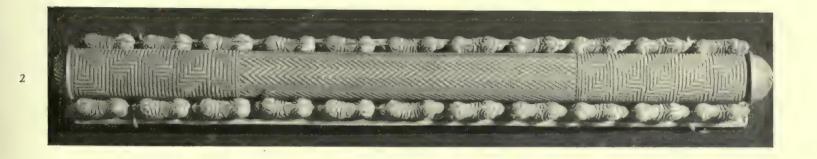
3



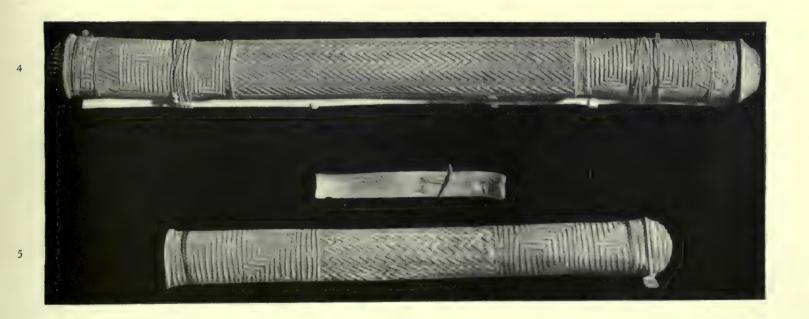
1, Gold comb-shaped ornament No. 3, from front. (See p. 22). 2, No. 3, from back. 3, Gold strip No. 9, from front. (See p. 26). 4, No. 9 from back.







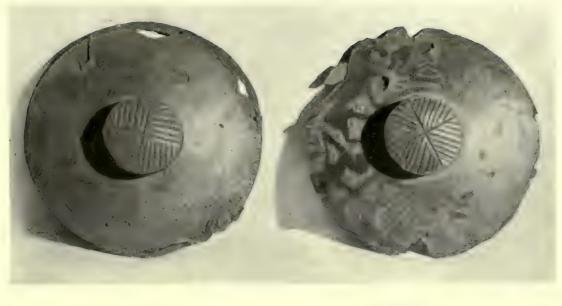




1, Wooden core. 2, 3, Gold tube No. 4 from top and side. 4, Gold tube No. 5. 5, Gold tube No. 6.

See pp. 23 ff.





1 (12:11) 2 (12:11)



3 (12:11)



4 (12:11)



5 (11:12)

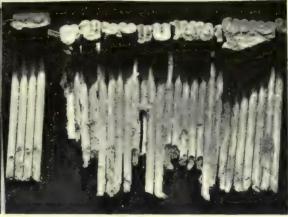
1, 3, 5, Silver gold-plated "button", No. 11.

2, 4, 6, Silver gold-plated "button ", No. 10.

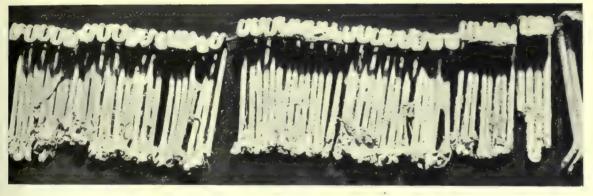








2





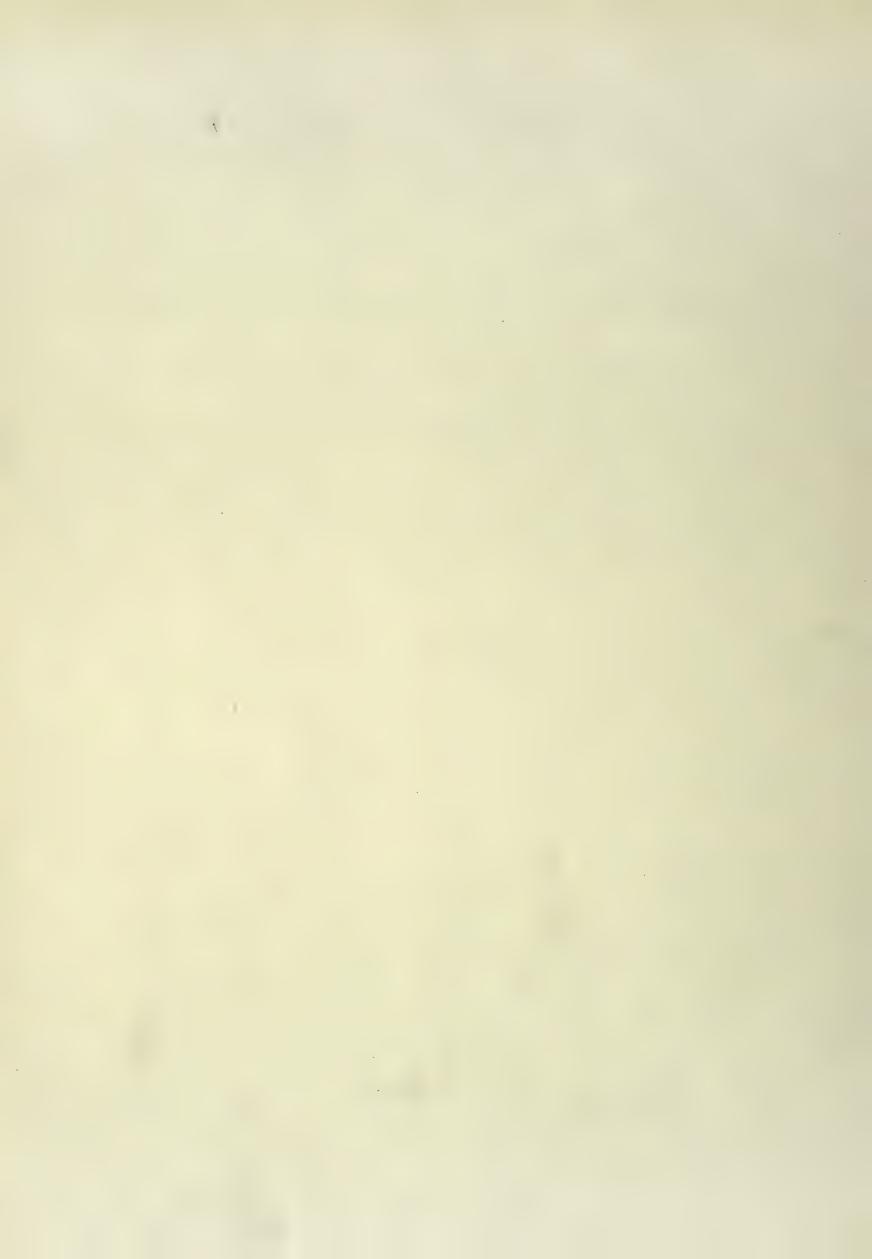


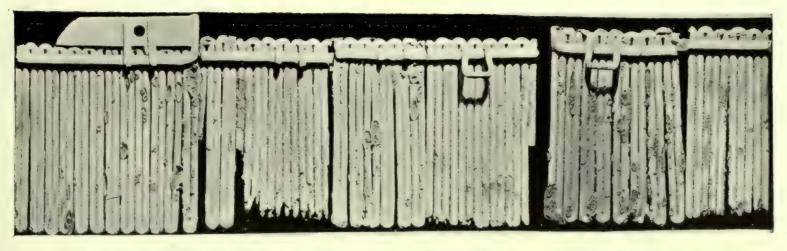


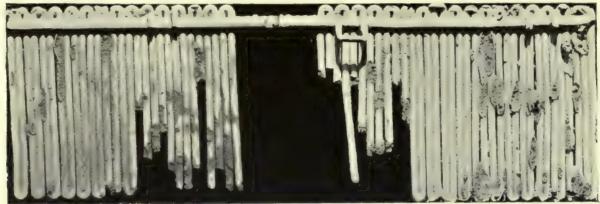
5

1, 2, Fringe of silver wire, No. 12. 3, 4, No. 13. 5. No. 14.

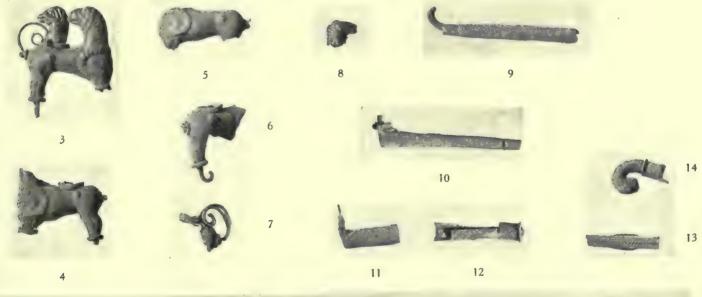
See p. 28,

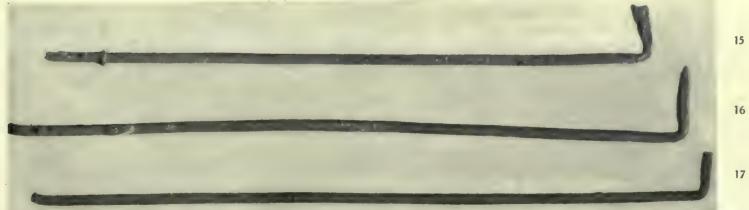






1, 2

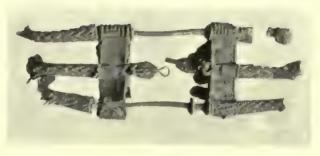




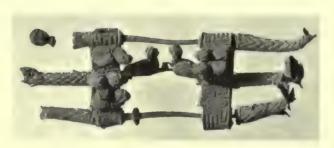
1, 2, Fringe of silver wire, No. 15. (See p. 29). 3-14, Fragments of silver fibulas, No. 18. (See p. 31). 15-17, Silver rods, No. 19. (See p. 32).





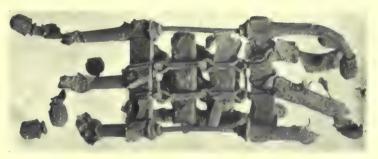


2 (8:9)

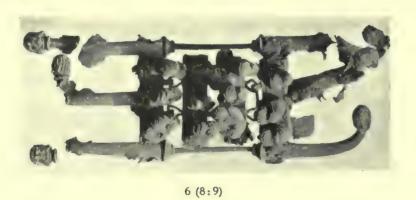


3 (8:9)



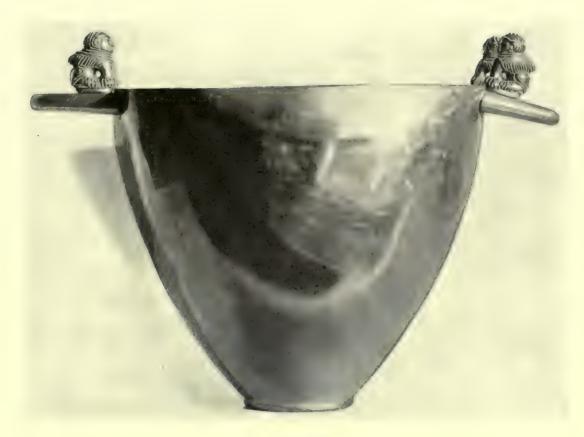


5 (8:9)



1-3, Gold covered silver clasp, No. 16. (See p. 29). 4-6, Gold covered silver clasp, No. 17. (See p. 30).





1 (10:9)



2 (3:2)

1, 2, Gold skyphos, No. 20.





Fragments of gold foil, No. 21.





Bowl No. 23, of silver covered with gold.

See p. 33.





Bowl No. 23.



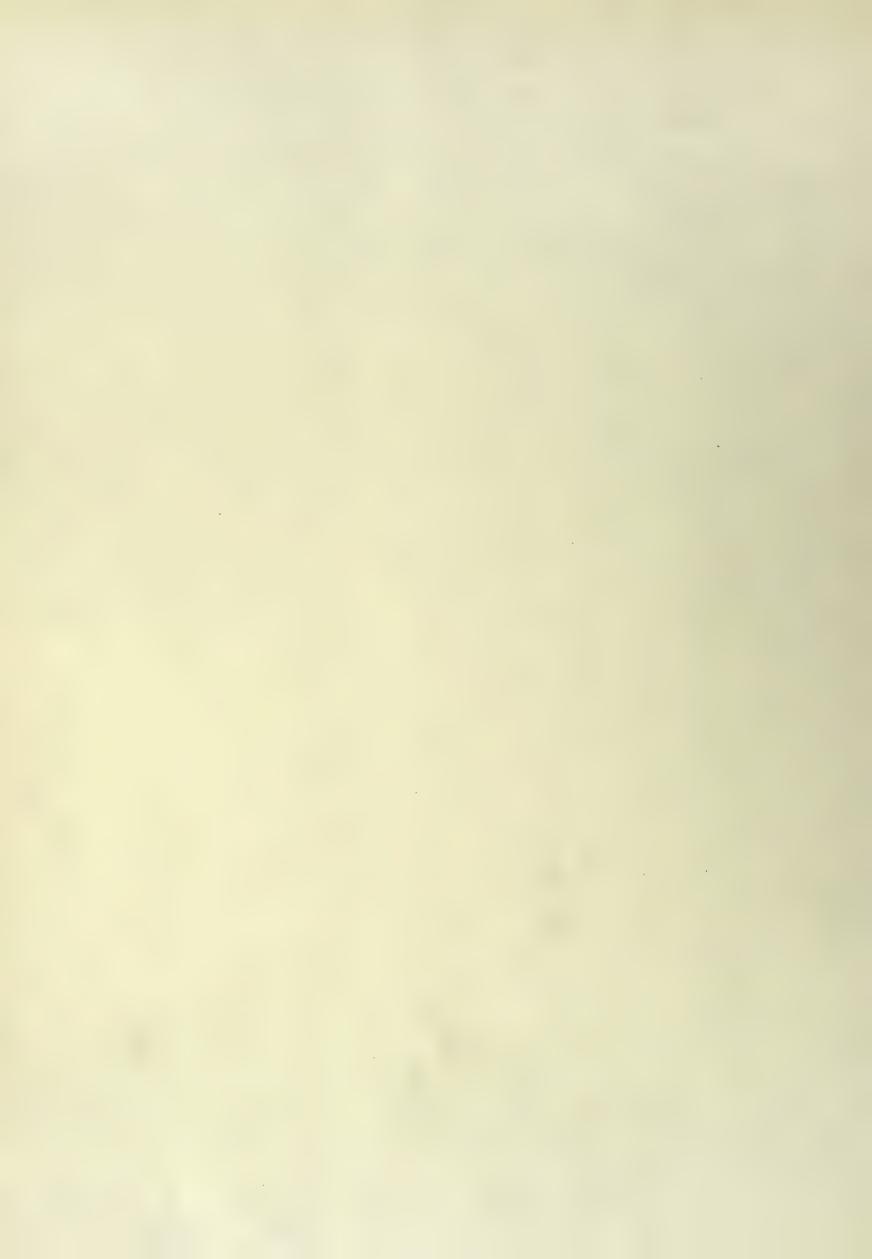


Bowl No. 23.





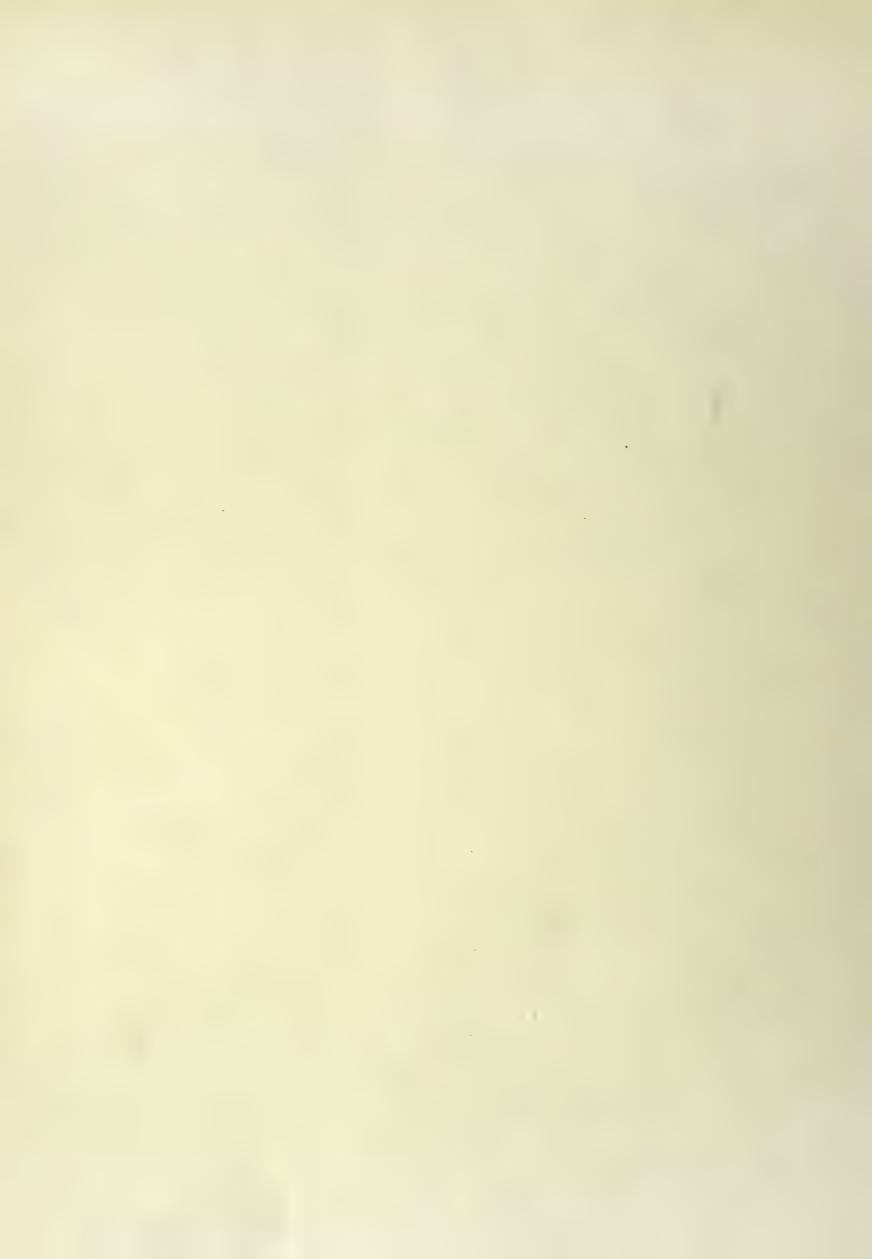
Bowl No. 23.

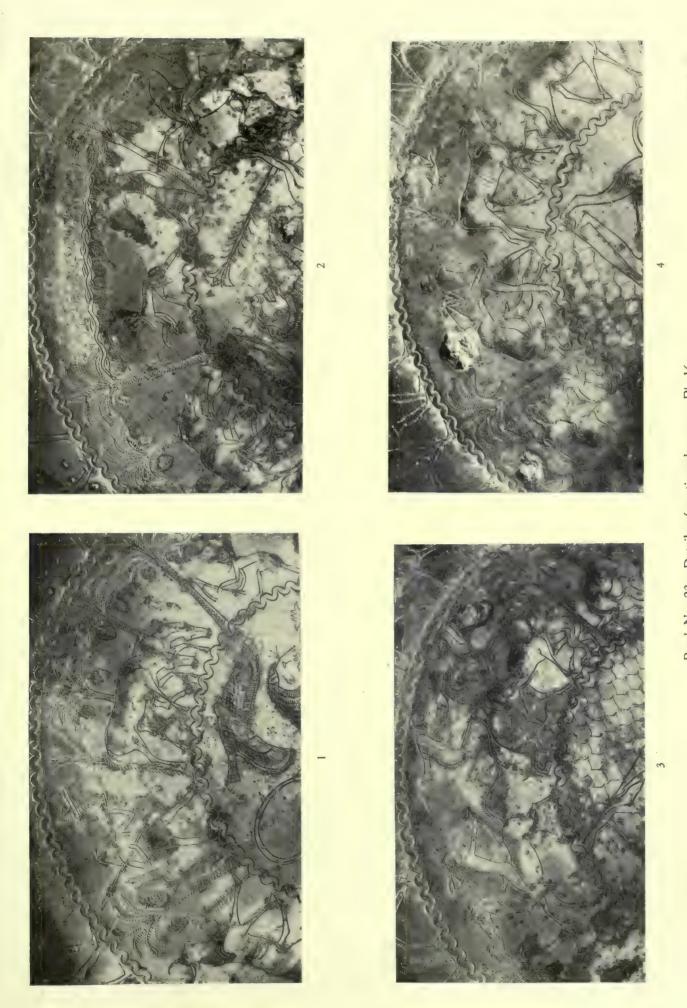




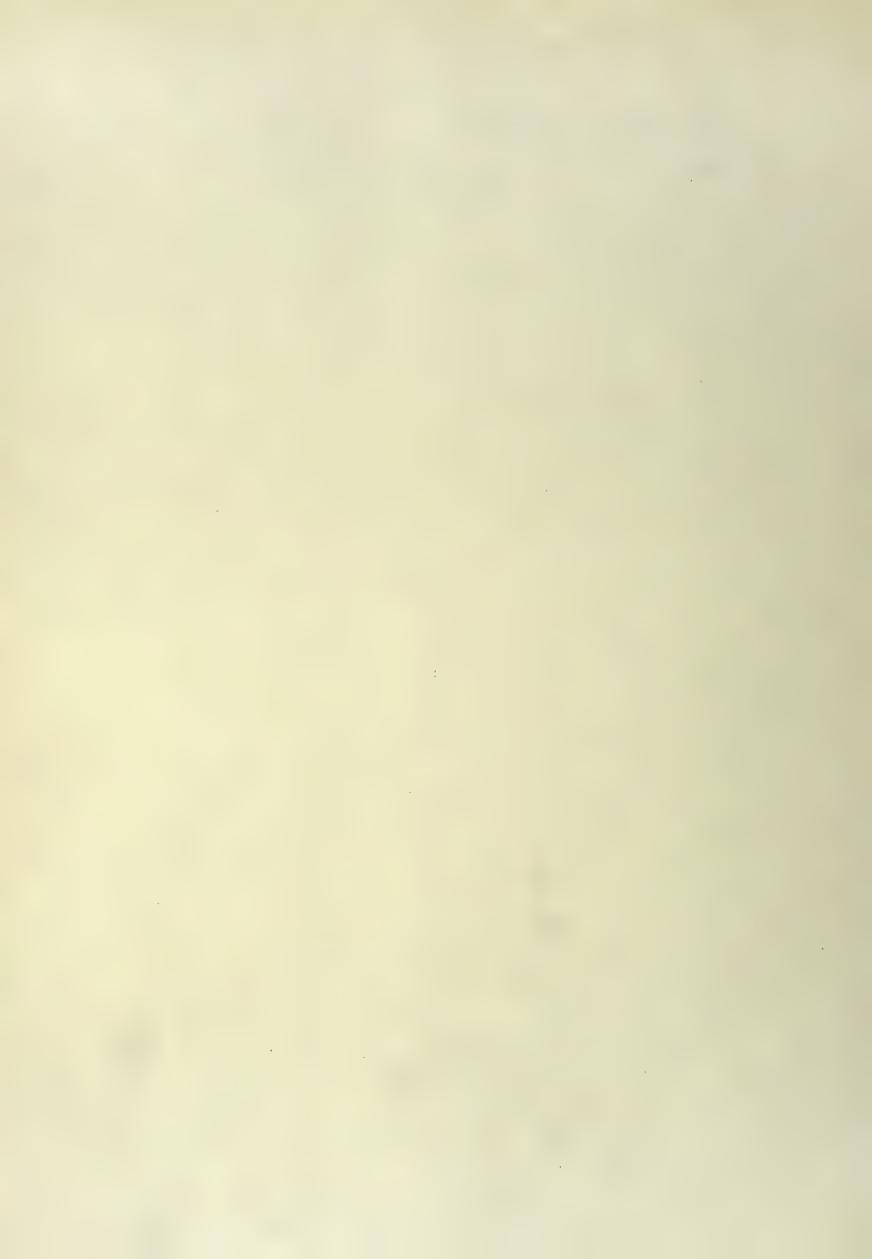
Bowl No. 23 (bottom).

See p. 37.





Bowl No. 23. Details of section shown on Pl. 16.







2 (3:1)

Bowl No. 23.

- 1, Detail, slightly enlarged, with chariot, and two warriors in combat. (See p. 35). 2, Detail of scene shown on Pl. 17, Fig. 4. (See pp. 36 f.).

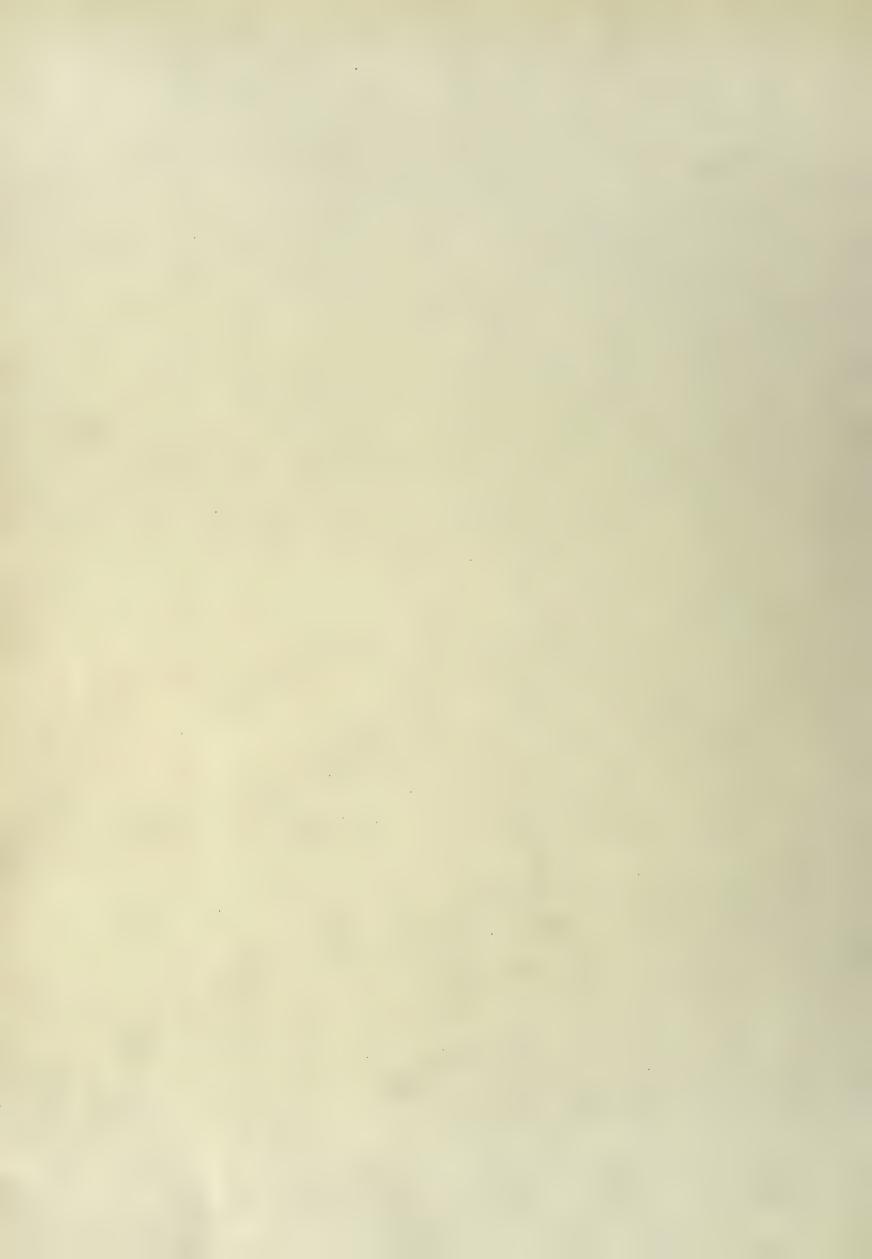






2 (11:14)

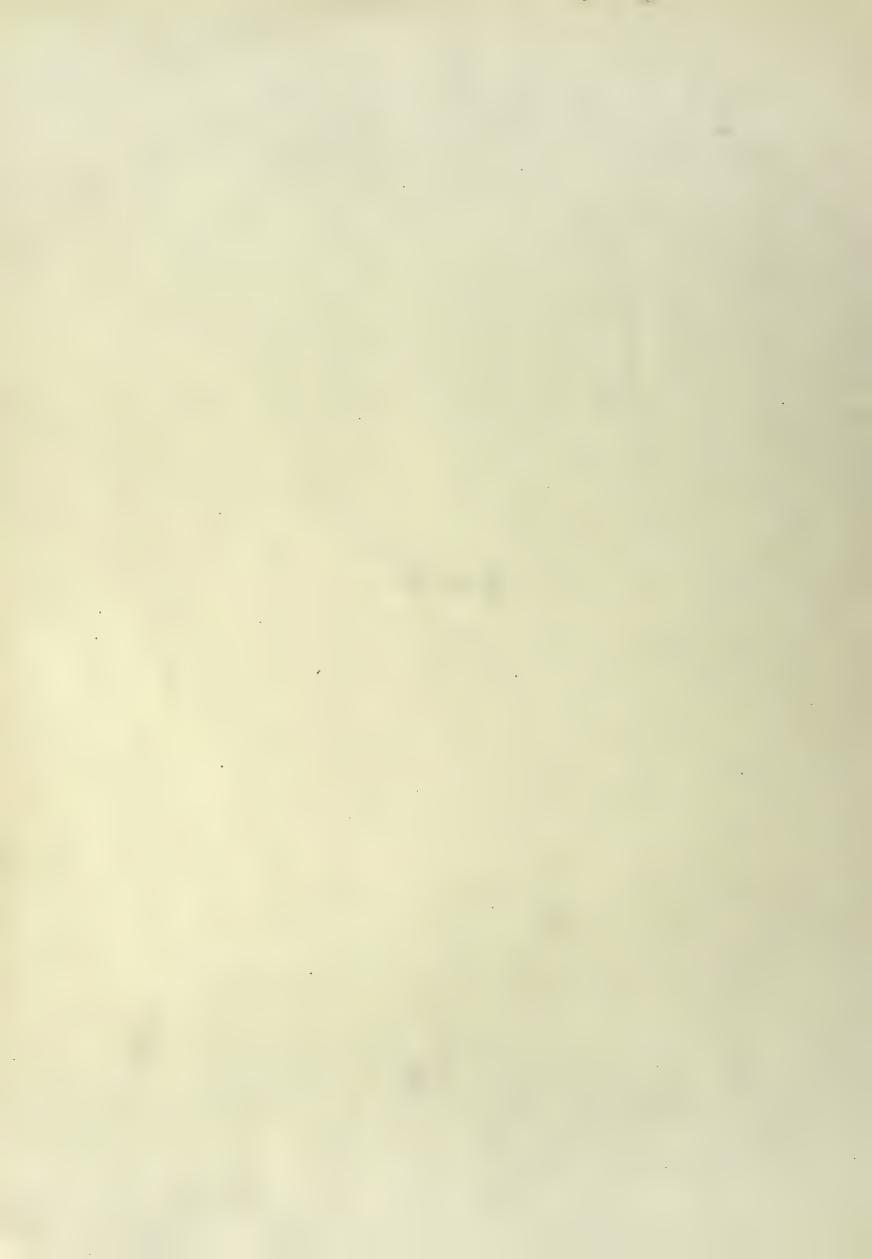
1, 2, Bowl No. 24, of silver covered with gold.







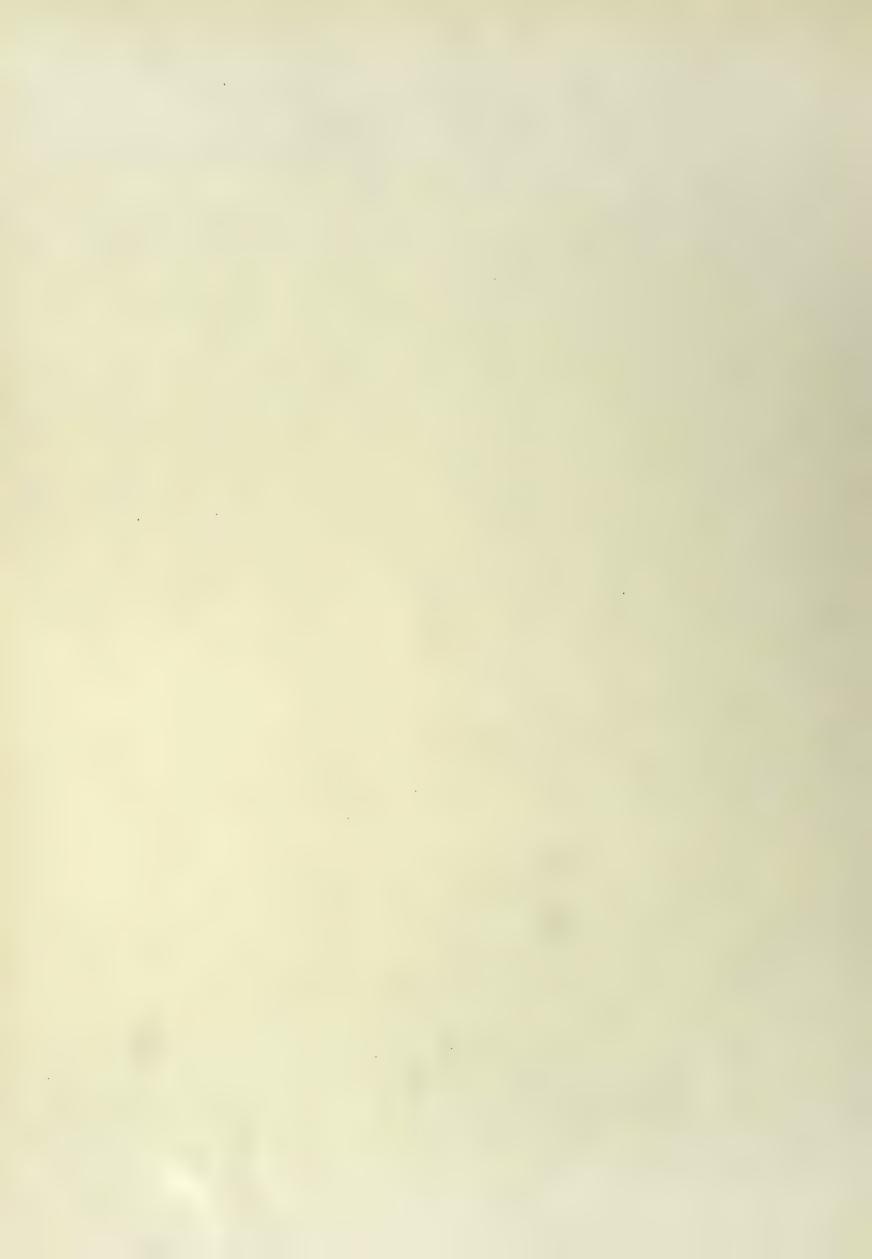
1, 2, Bowl No. 25, of silver covered with gold on inside.







1, Bottom of bowl No. 25. (See p. 39). 2, Detail from inside of No. 25. (See p. 39).







1, Silver bowl No. 26. (See p. 43). 2, Inscription on No. 26, enlarged five times. (See p. 44).







1, 2, Details of bowl No. 26, slightly enlarged.





1-5, Bronze dagger No. 27. (1, 2, 4, 5 about 7:13). Handle (Fig. 3) of amber surrounded by gold band.

Dagger (Figs. 4, 5) of bronze. Sheath (Figs. 1, 2) of silver.

See pp. 45 f.





1, Dagger No. 28, of iron in silver sheath, with gold floral ornament at end. Handle of ivory and amber.

2, 3, Details of sheath.

See pp. 46 ff.





1 (1:2)



2 (2:3)

3 (2:3)

1, Silver bowl, No. 30.

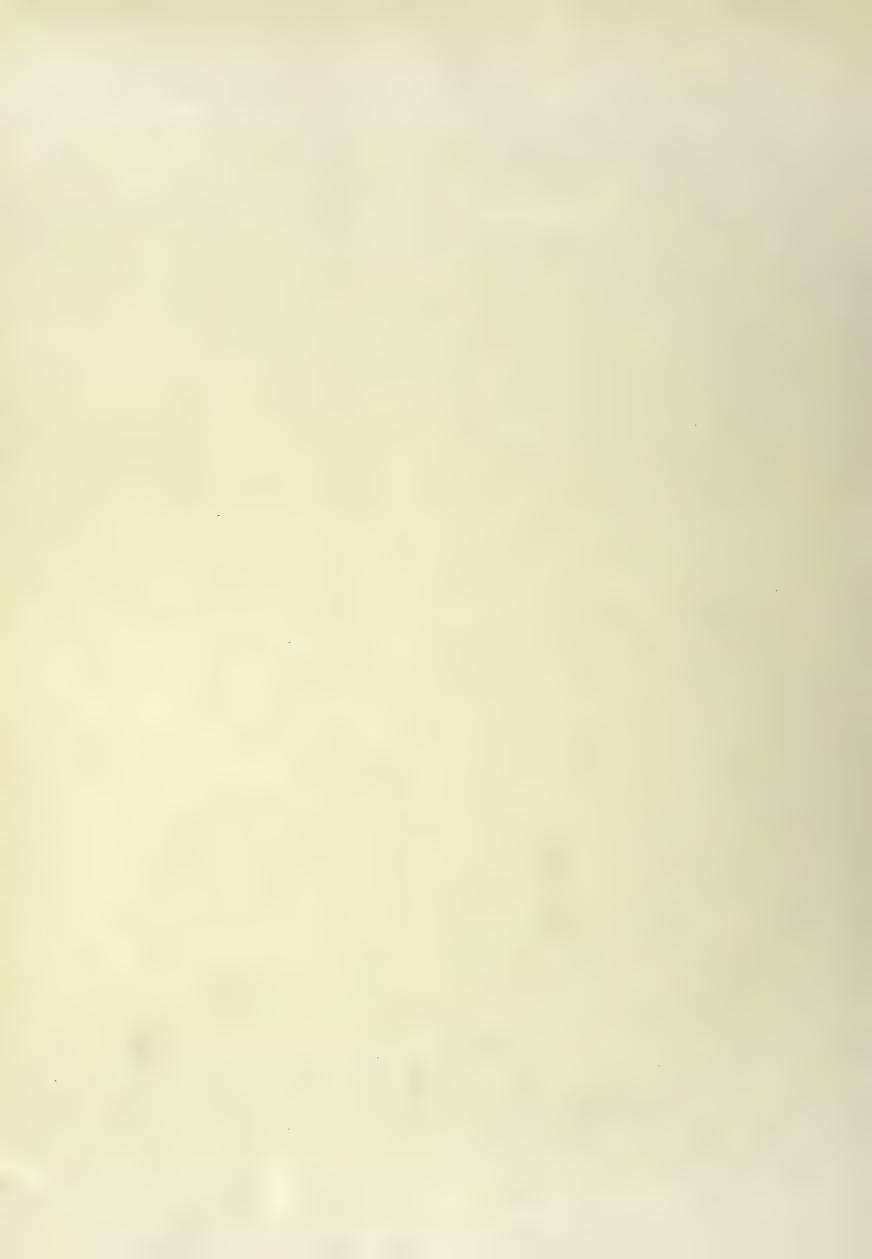
2, Lid of same.

3, Simpulum.





1, Bronze, silver-covered handle No. 31, (back). See p. 49. 2, No. 31, (front). See p. 50. 3, Silver bowl No. 32. (See p. 50).







1 (2:3)





2 (2:3)

1, Silver plate No. 34. 2, Silver plate No. 35. (See p. 51).
3, No. 40 (fragment of silver dagger hilt with iron blade). See p. 52. 4, Silver knob No. 29. (See p. 48).



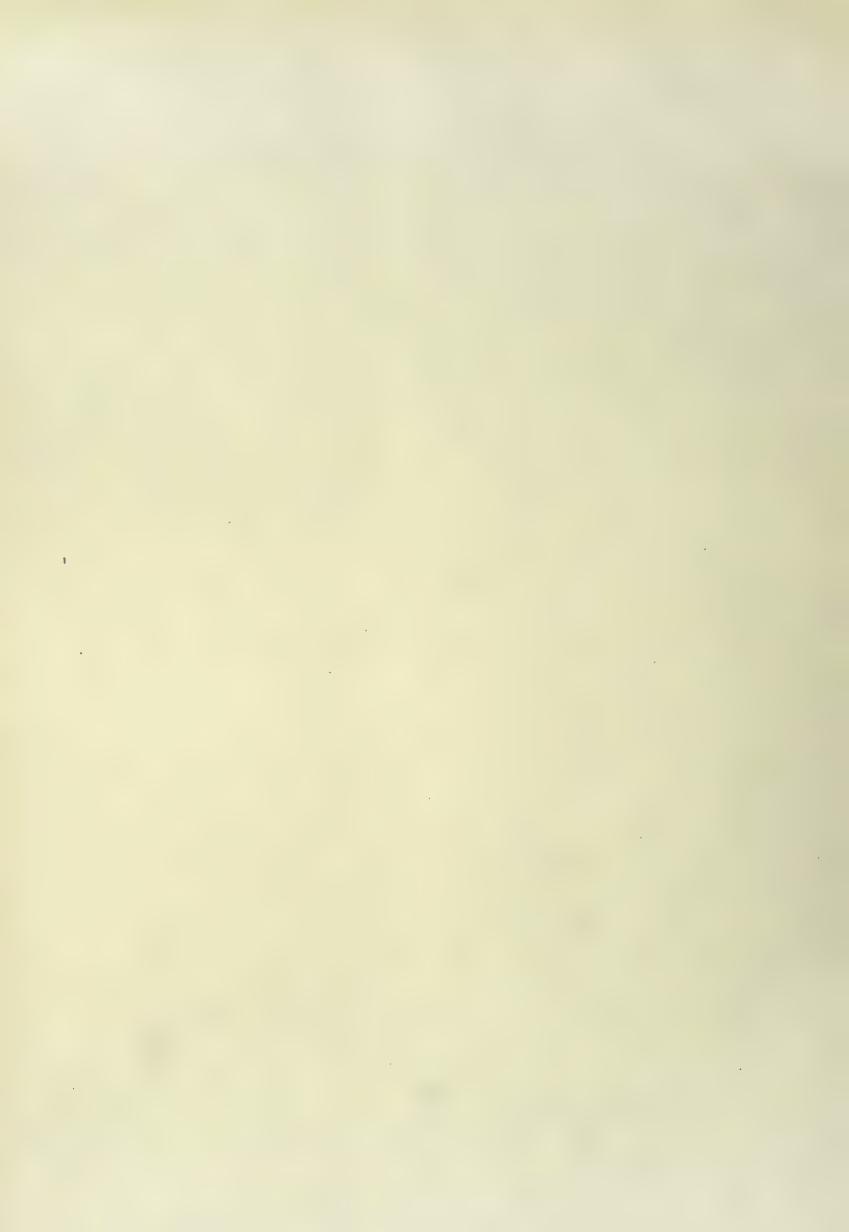


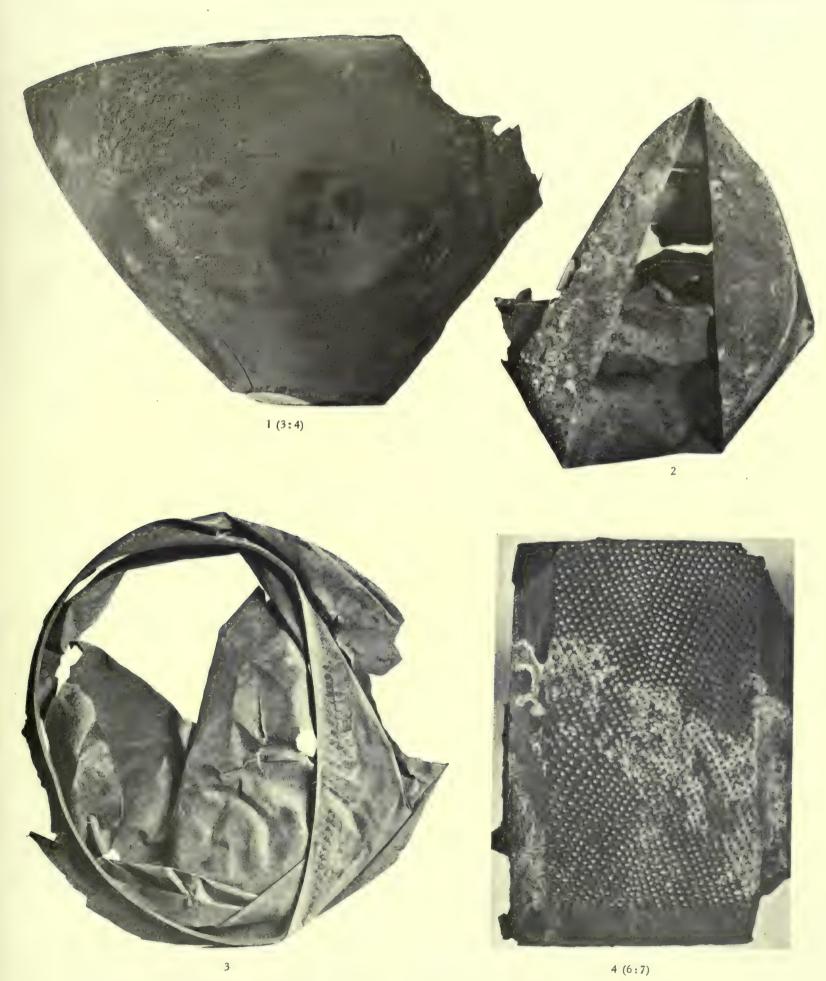




1, Silver bowl No. 33. 2, 3, Silver oinochoe No. 36. Fig. 3 shows gold palmette on side.

See p. 51.





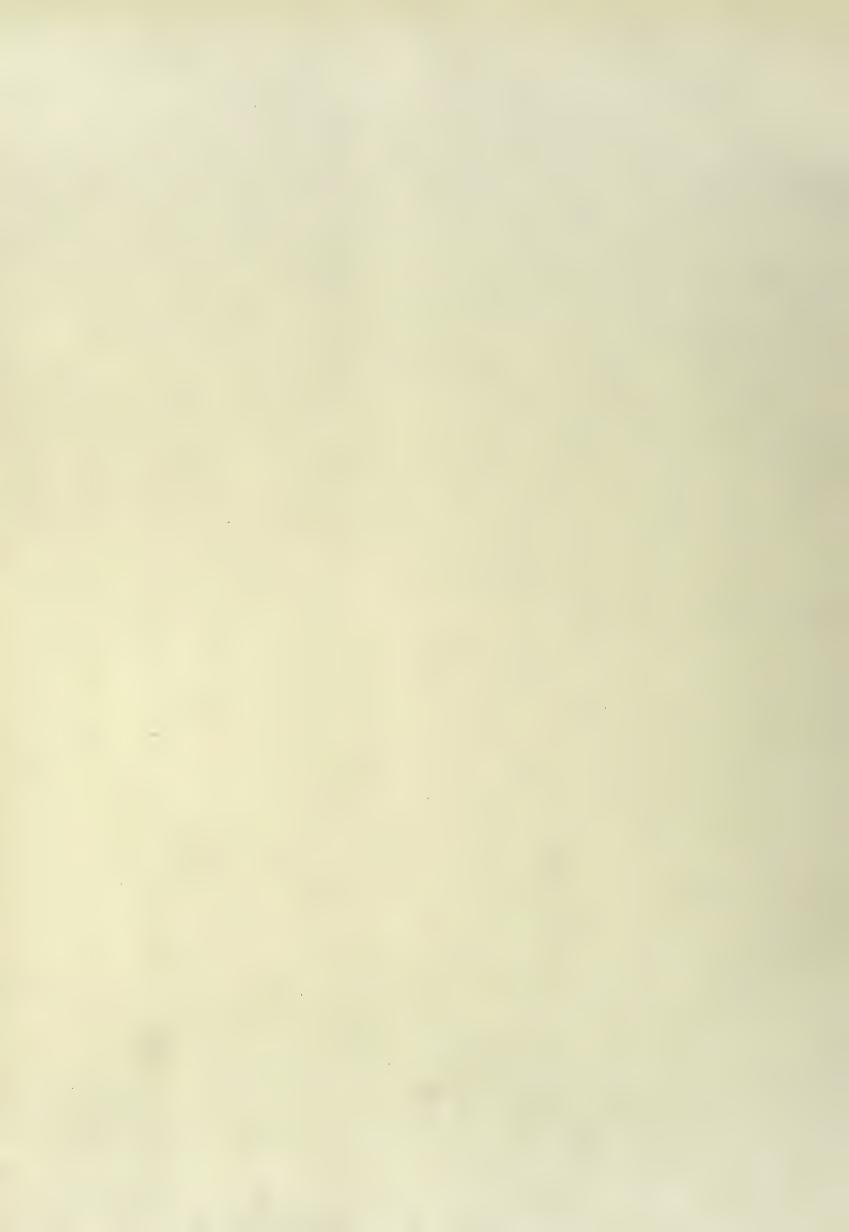
1, Silver skyphos No. 37. 2, Silver cup No. 38. 3, Silver bowl No. 39. 4, Silver strainer No. 41.

See pp. 51 f.



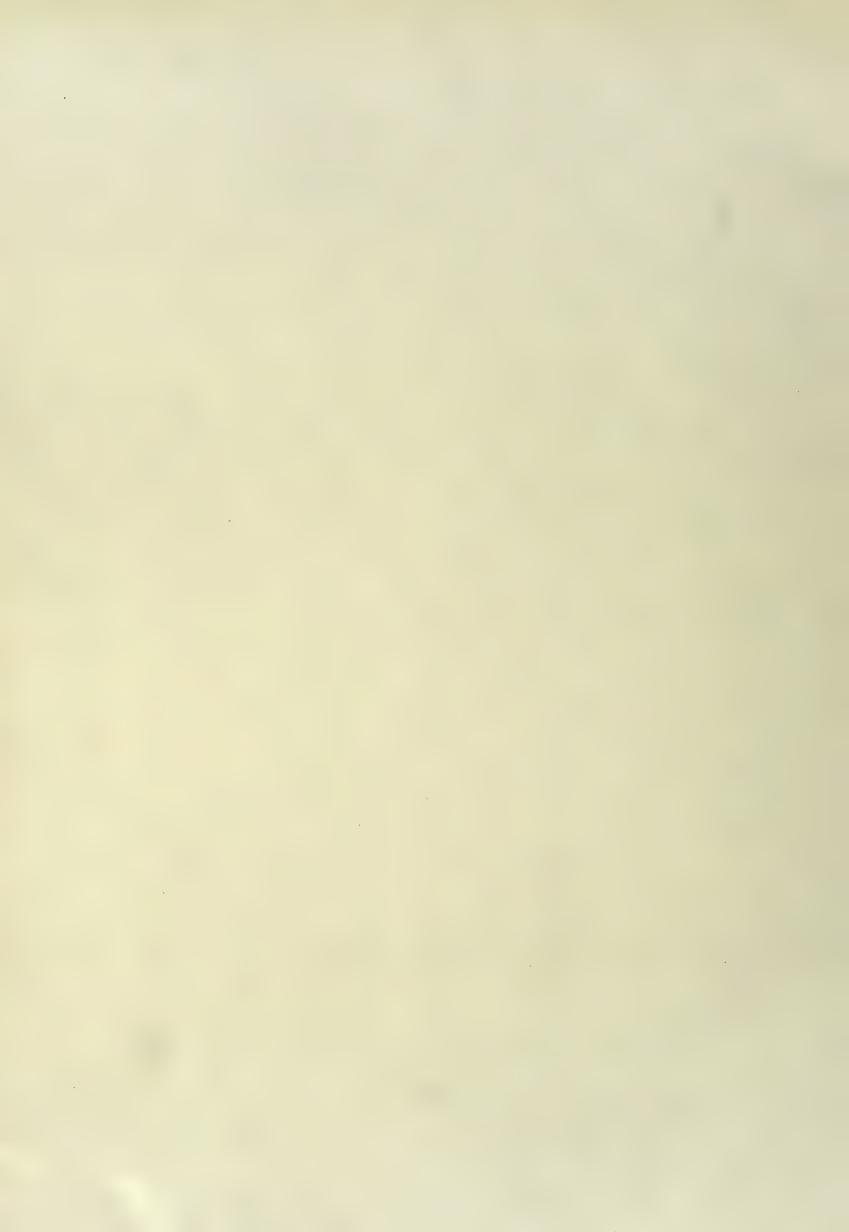


No. 42. Fragments of ornamented silver strips.





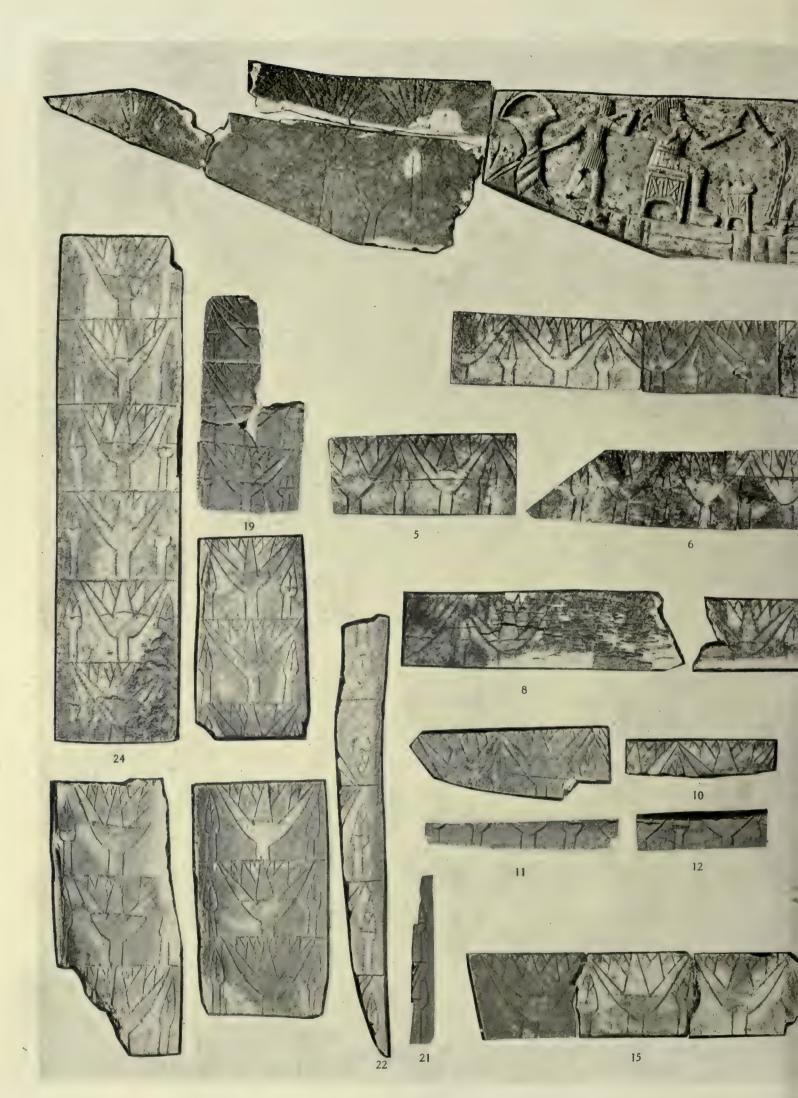
No. 42. Fragments of ornamented silver strips.





1-12, No. 43. Fragments of silver vases.

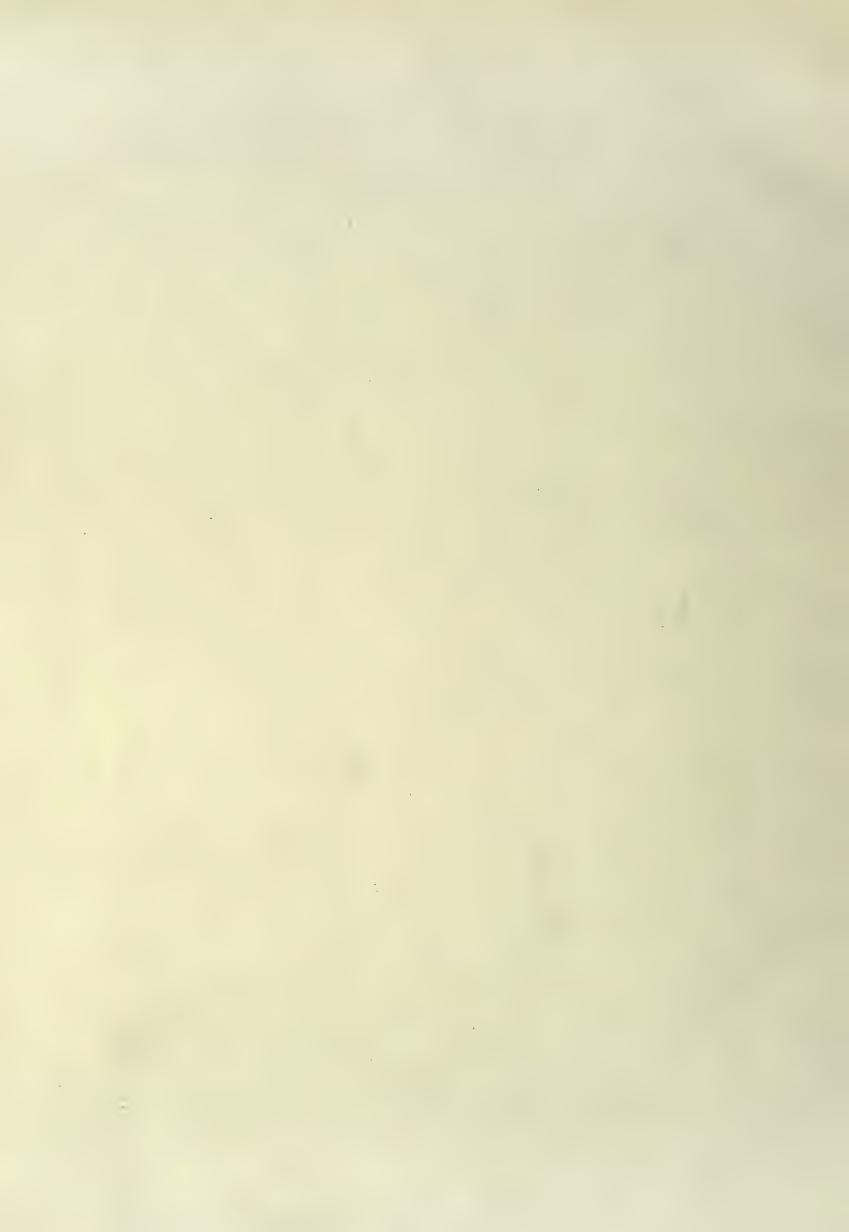
15, 16, No. 44. Fragments of silver fibulas.

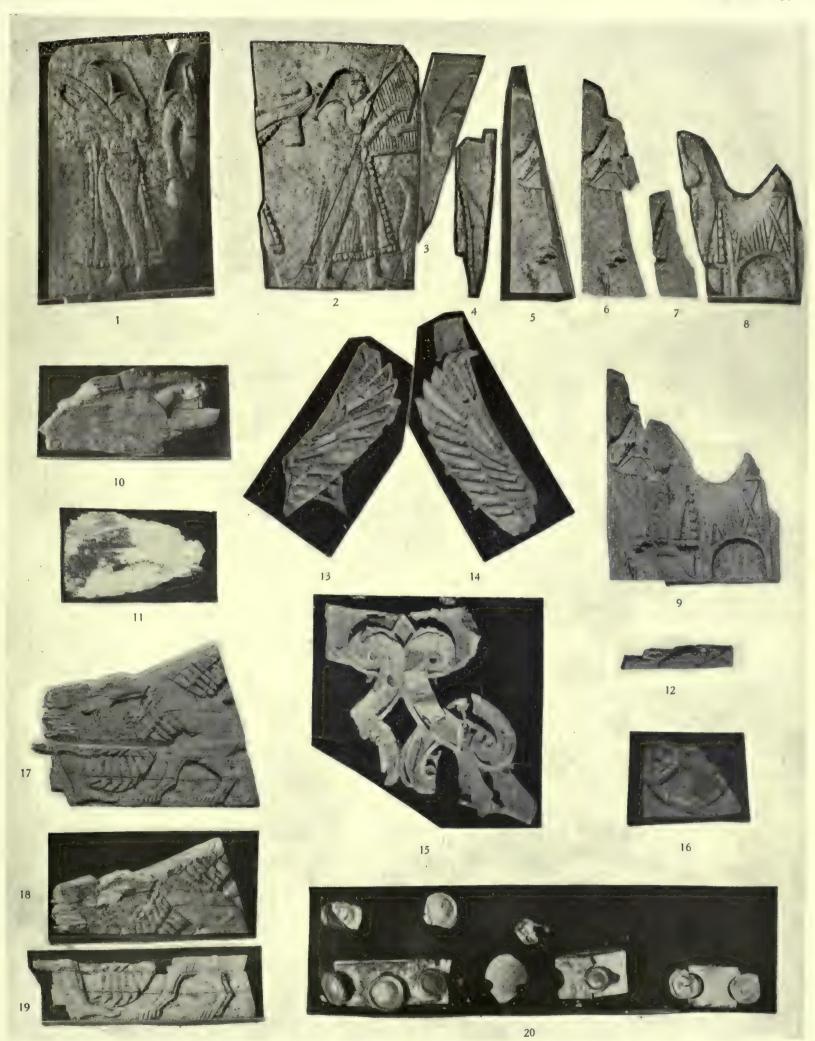


Ivory fragments

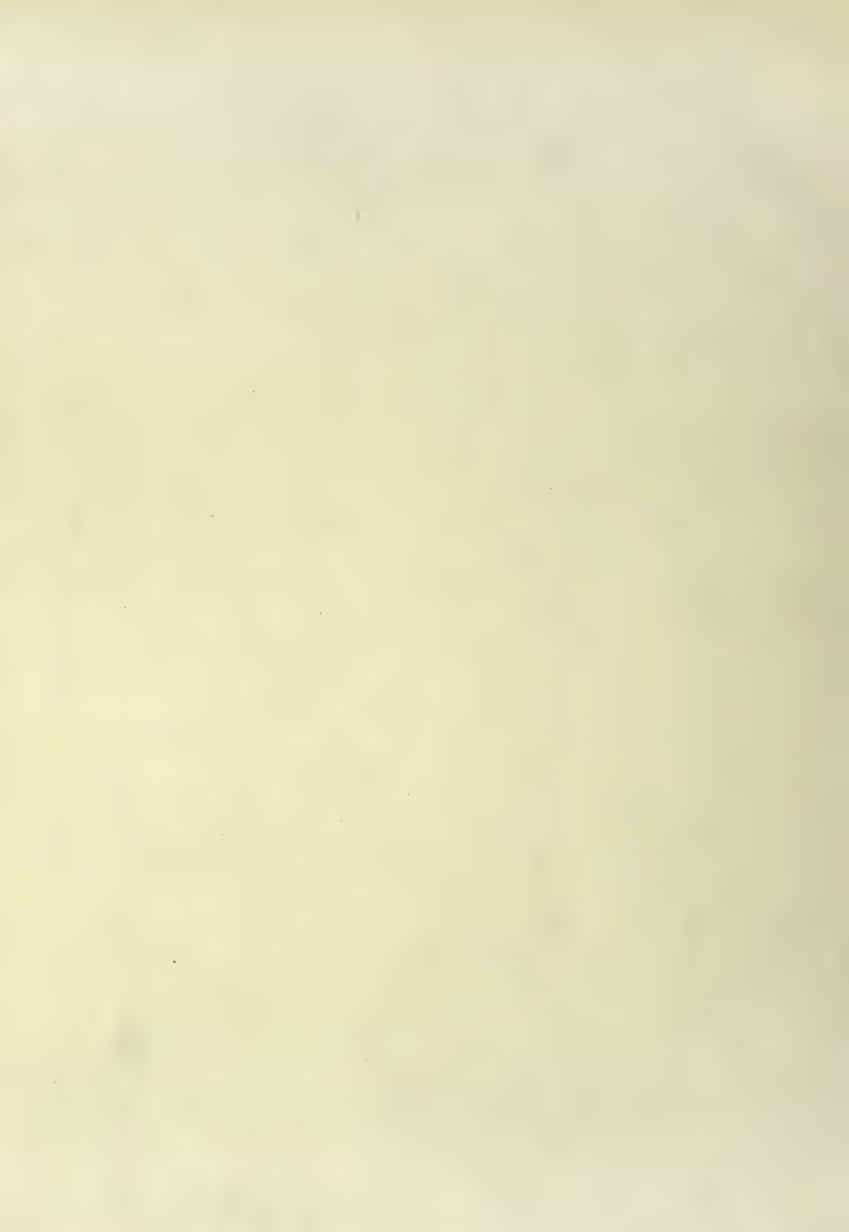


e pp. 54 ff.).



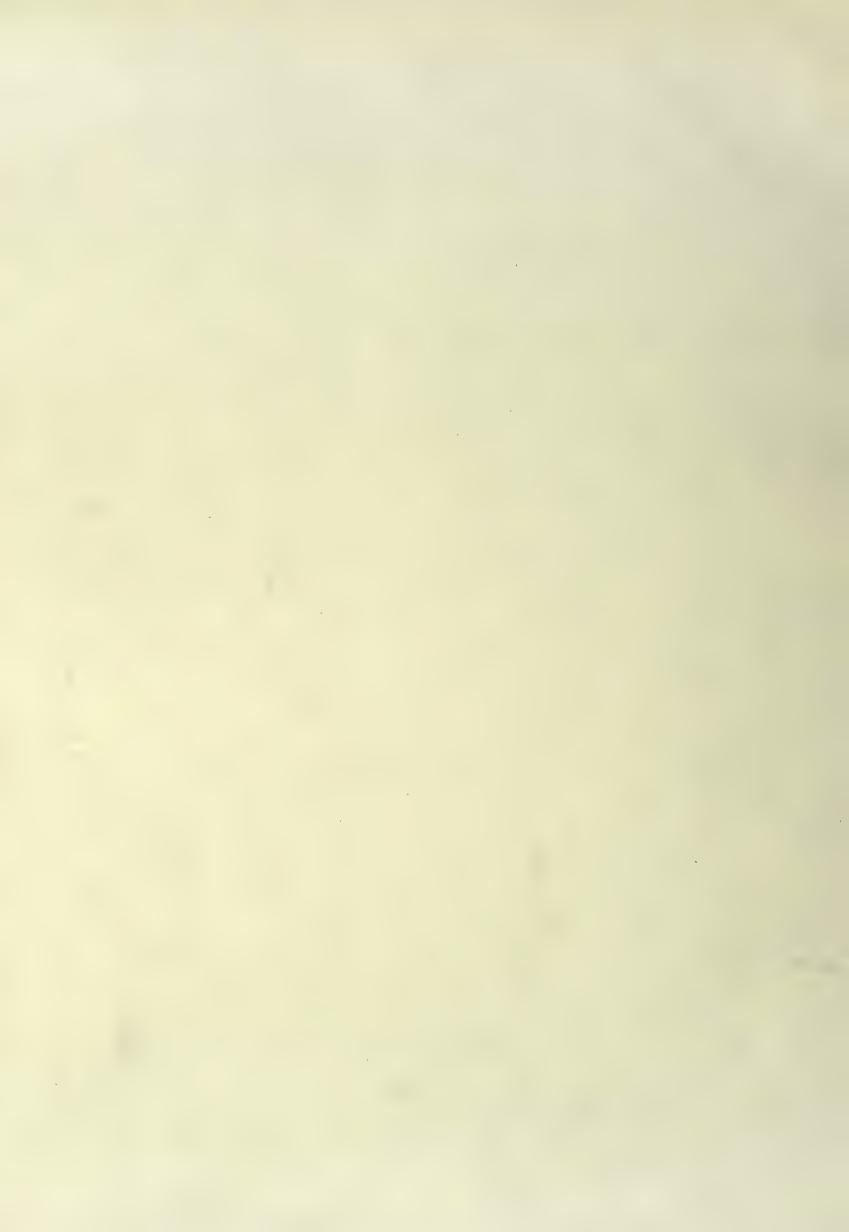


Ivory fragments. (See pp. 57 f.).



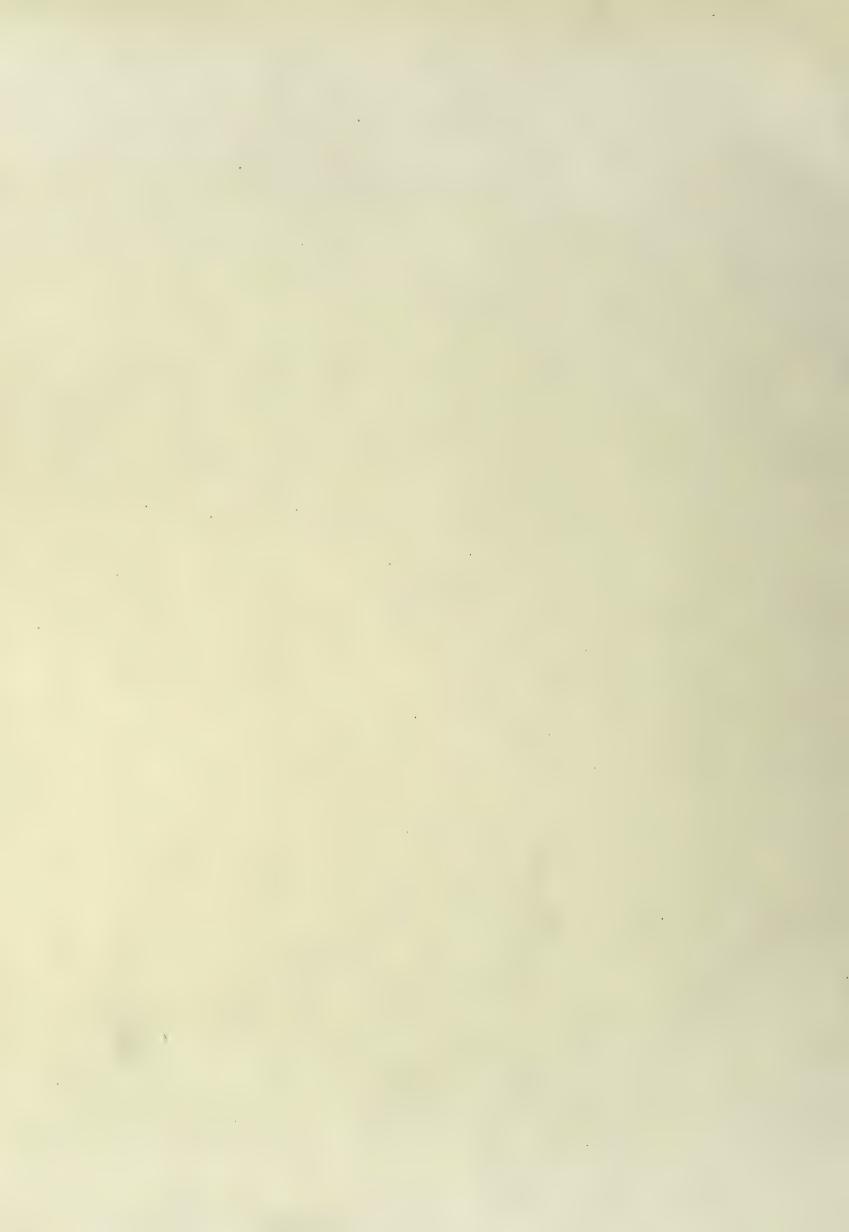


Ivory fragments. (See pp. 58 ff.).



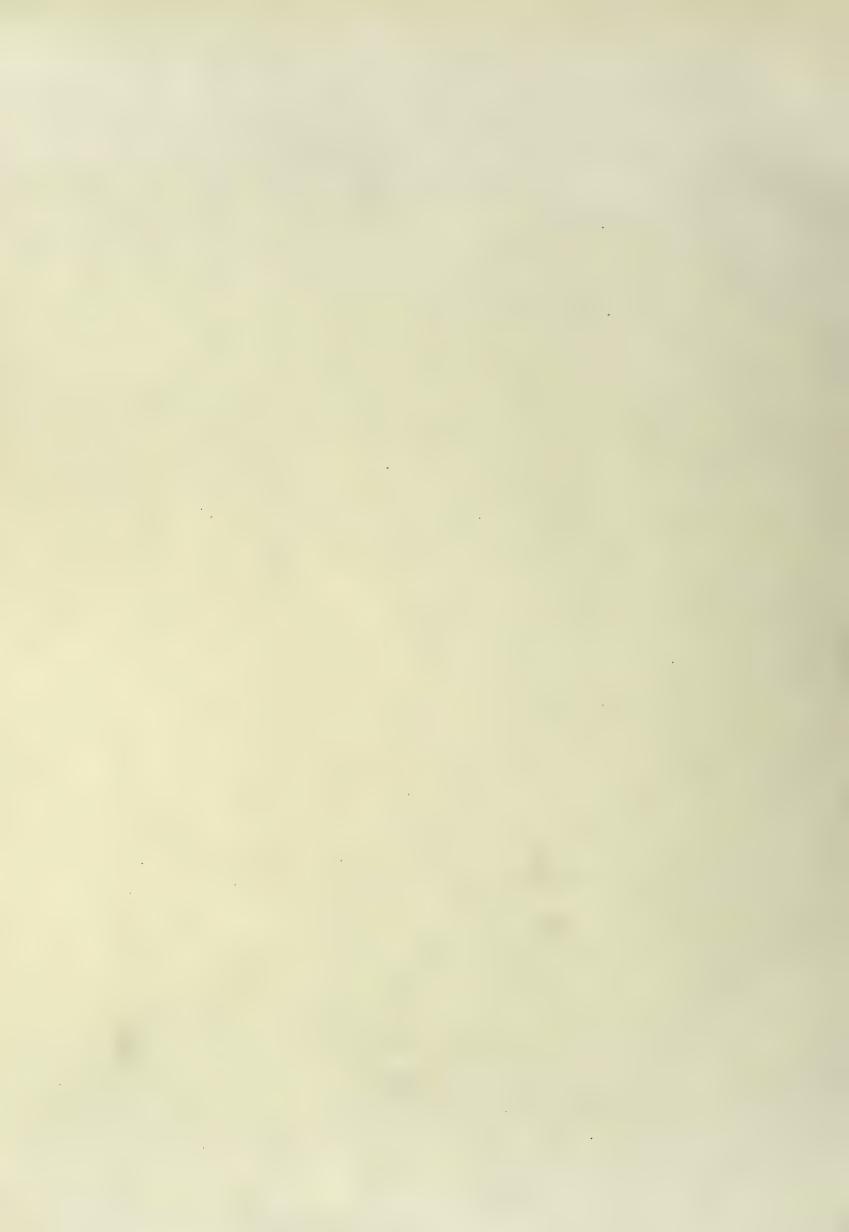


Ivory fragments. (See pp. 60 f.).





Ivory fragments. (See pp. 61 ff.).





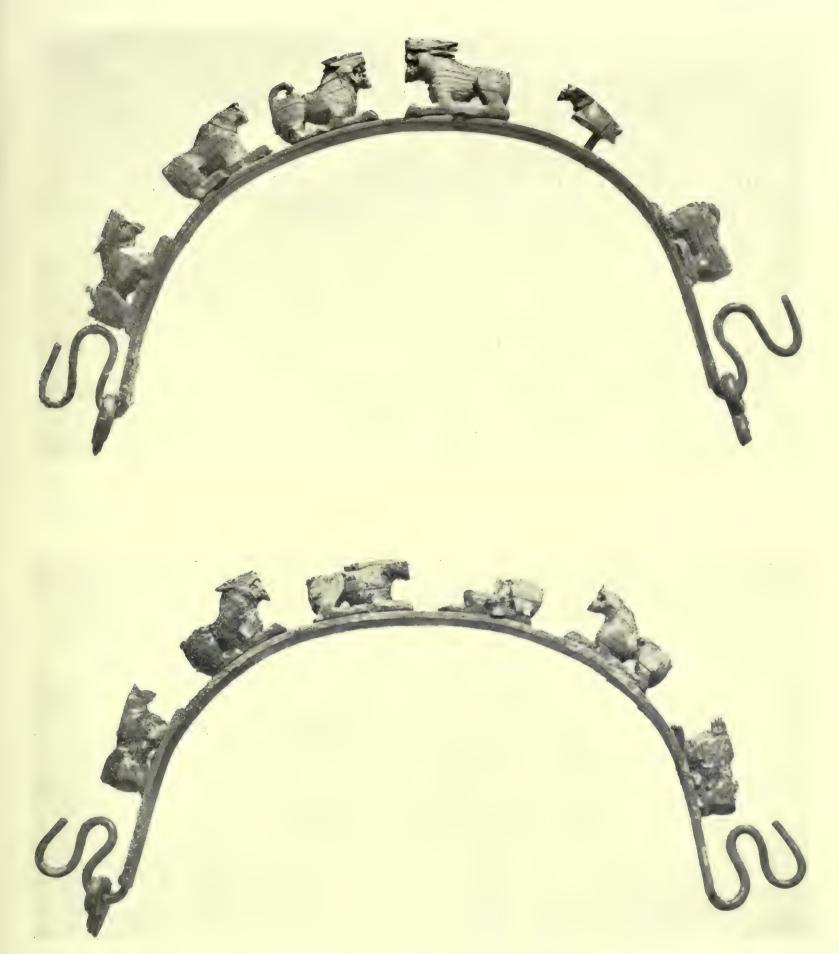
Ivory fragments. (See pp. 63 f.).



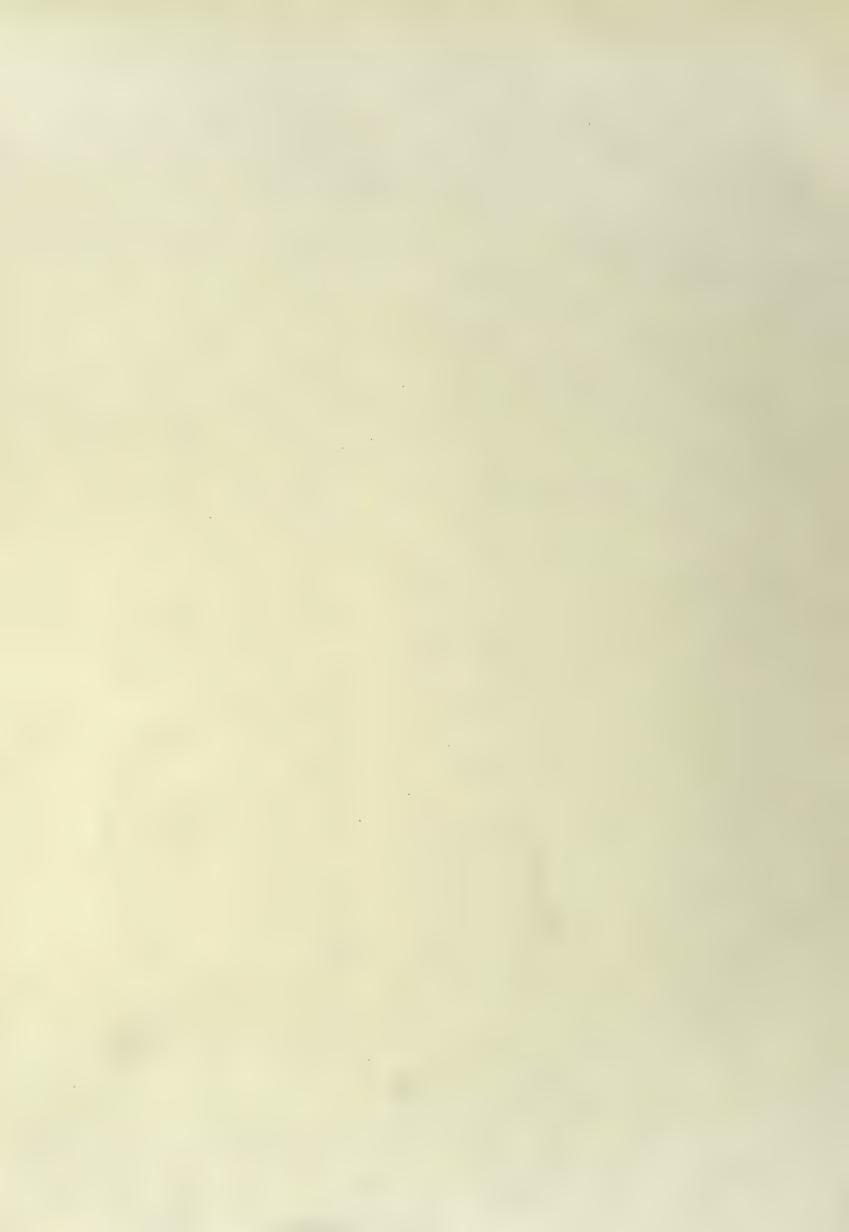


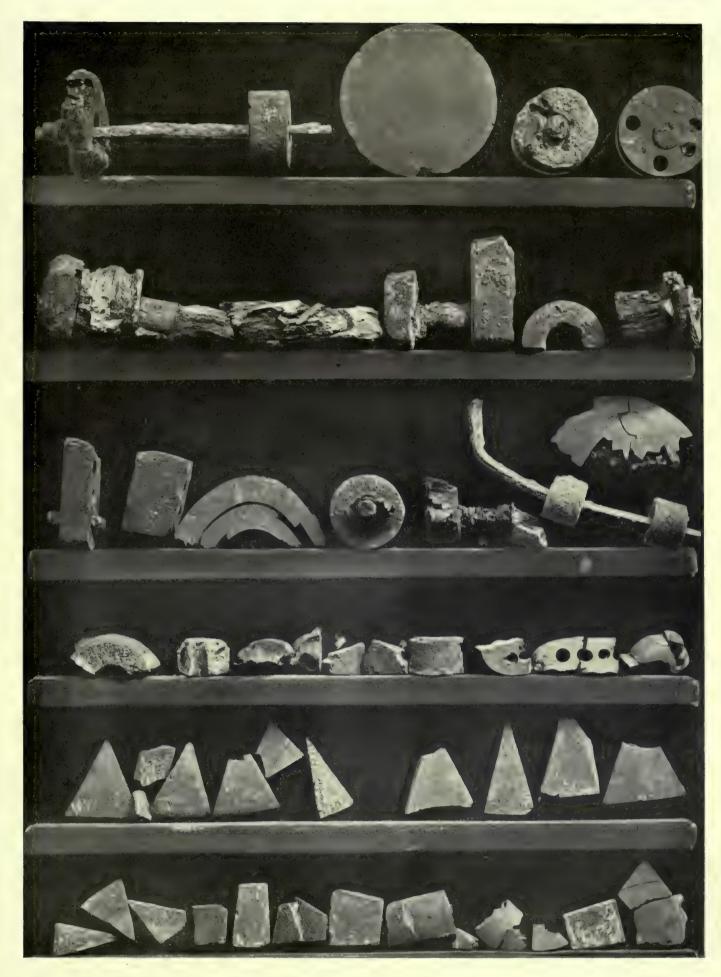
Ivory fragments. (See p. 64).



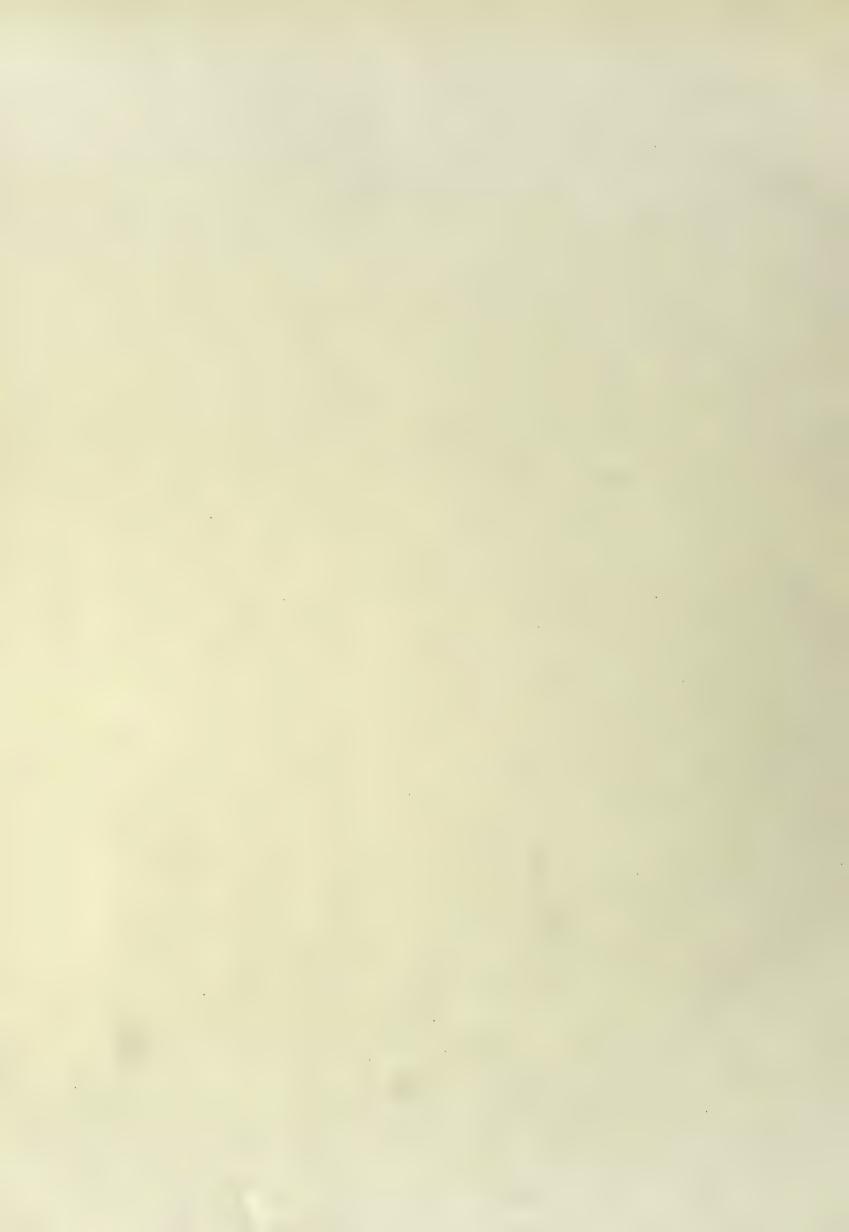


Bronze handles with attached ivory lions. (See pp. 64 f.).





Amber fragments, Nos. 56-59. (See p. 65).





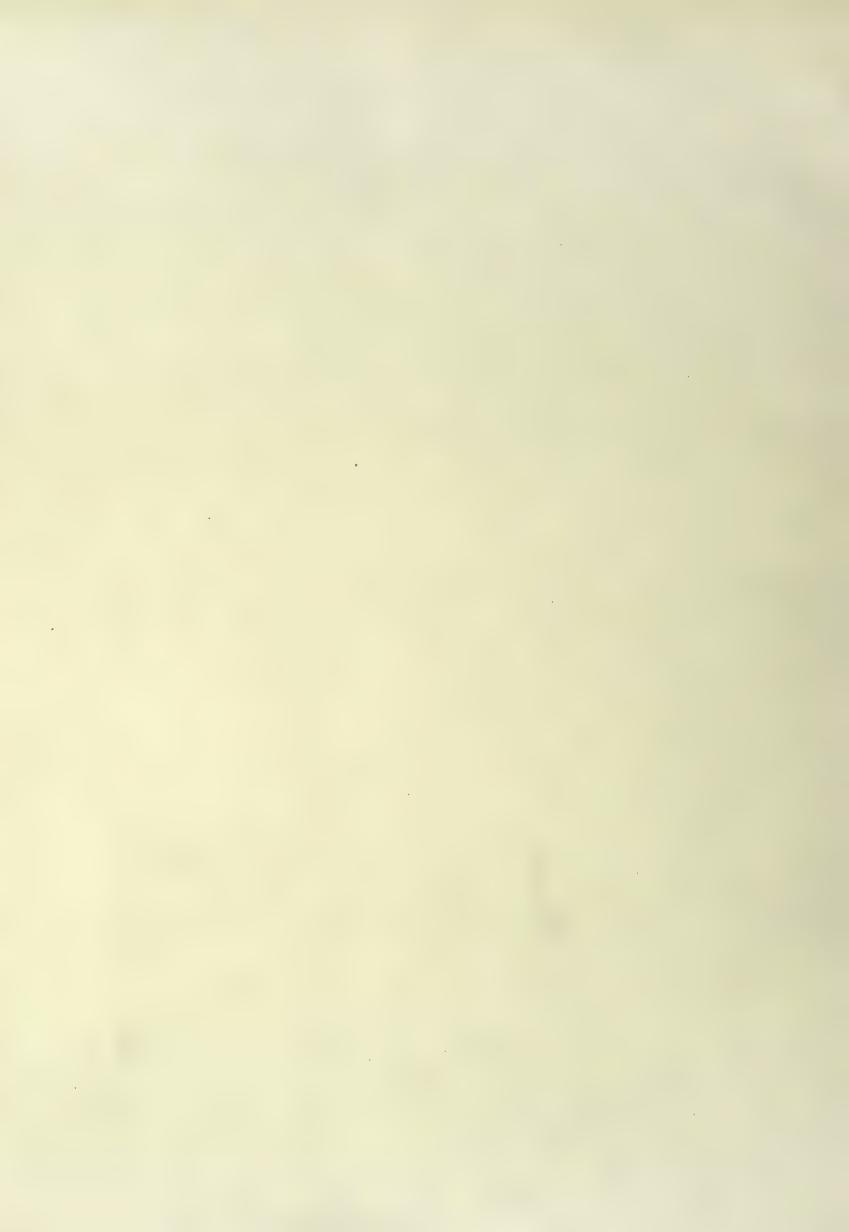




1, Glass bowl, No. 60. 2, Fragment of glazed bowl, No. 62.

3, Glazed vase, No. 61.

See pp. 65 f.





1, 2, Two fragments of bronze bowl, No. 64.

3-6, Paste fillings for the heads in relief of bowl, No. 64.

7-10, Fragments of Proto-Corinthian ware, No. 63.

See p. 66.

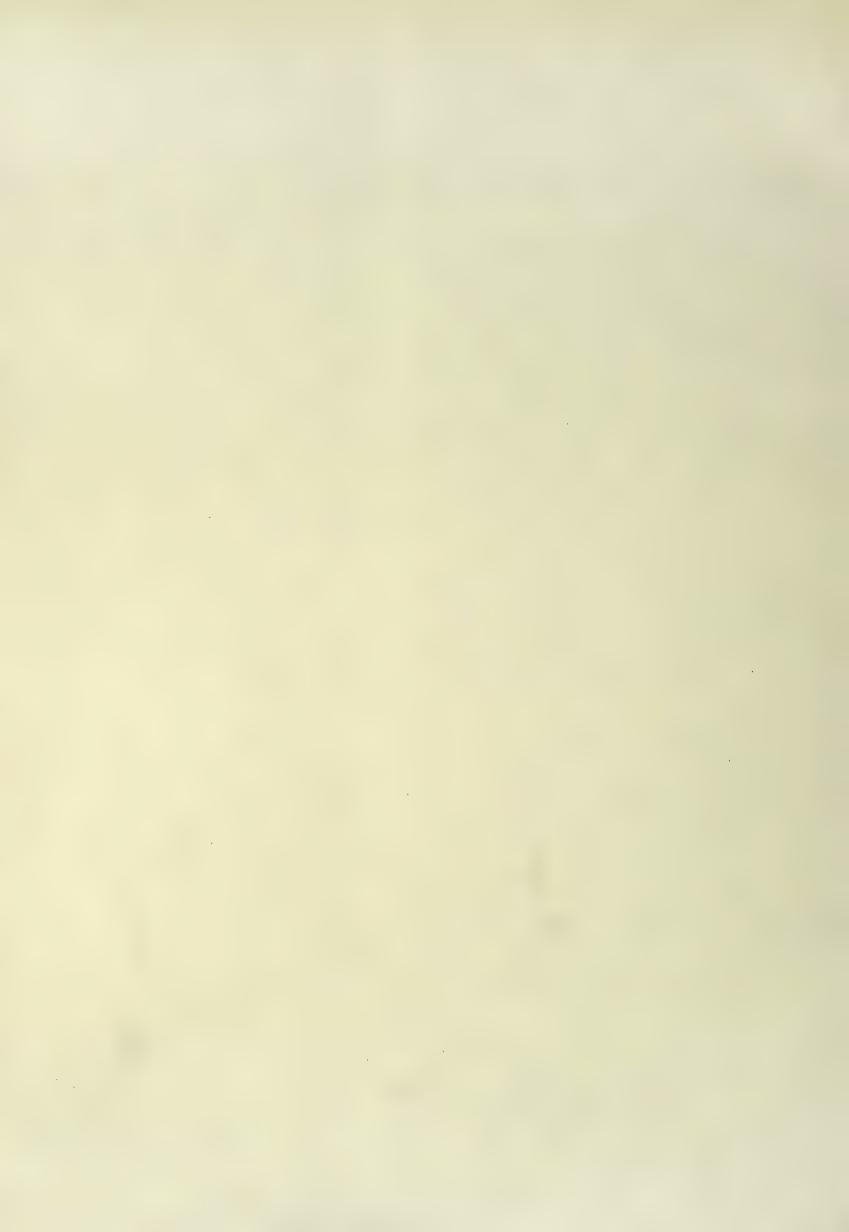






1, 2, Two views of larger fragment of bronze bowl, No. 64. 3, No. 69 (inner shell of No. 64).

See pp. 66 f.





1 (2:3)



2 (1:2)

1, 2, Bronze bowl, No. 65.





1 (6:7)

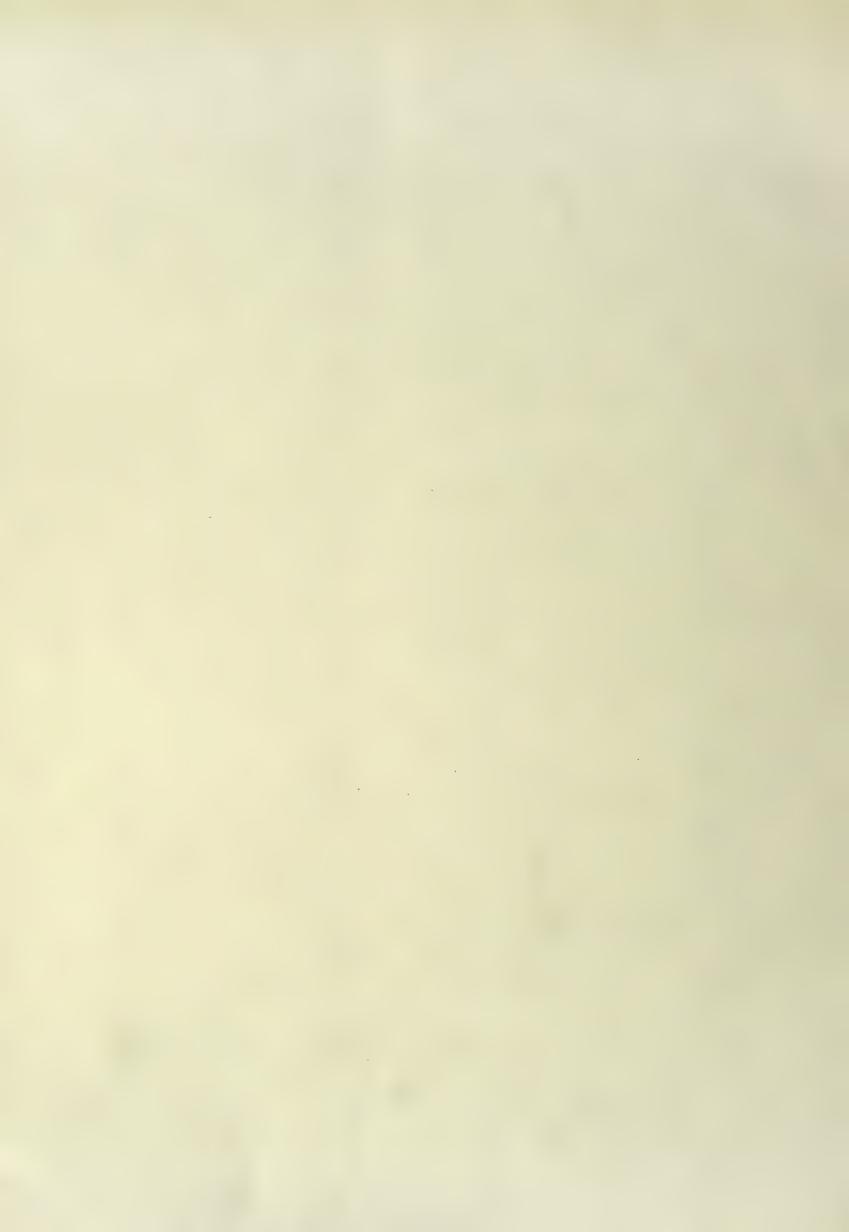


2 (3:5)

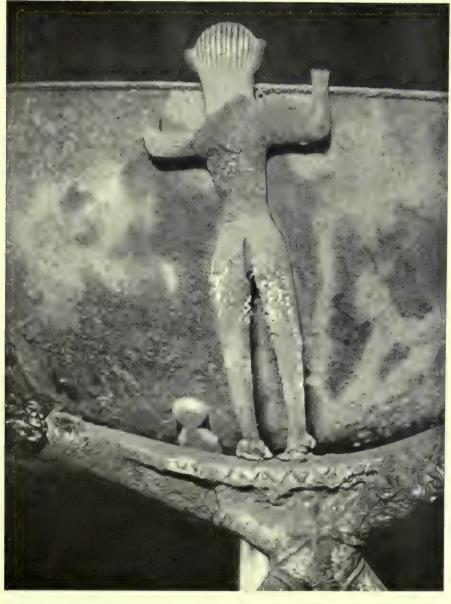


3 (3:4)

1, Bronze bowl, No. 66. 2, Bronze bowl, No. 67. 3, Bronze bowl, No. 68.









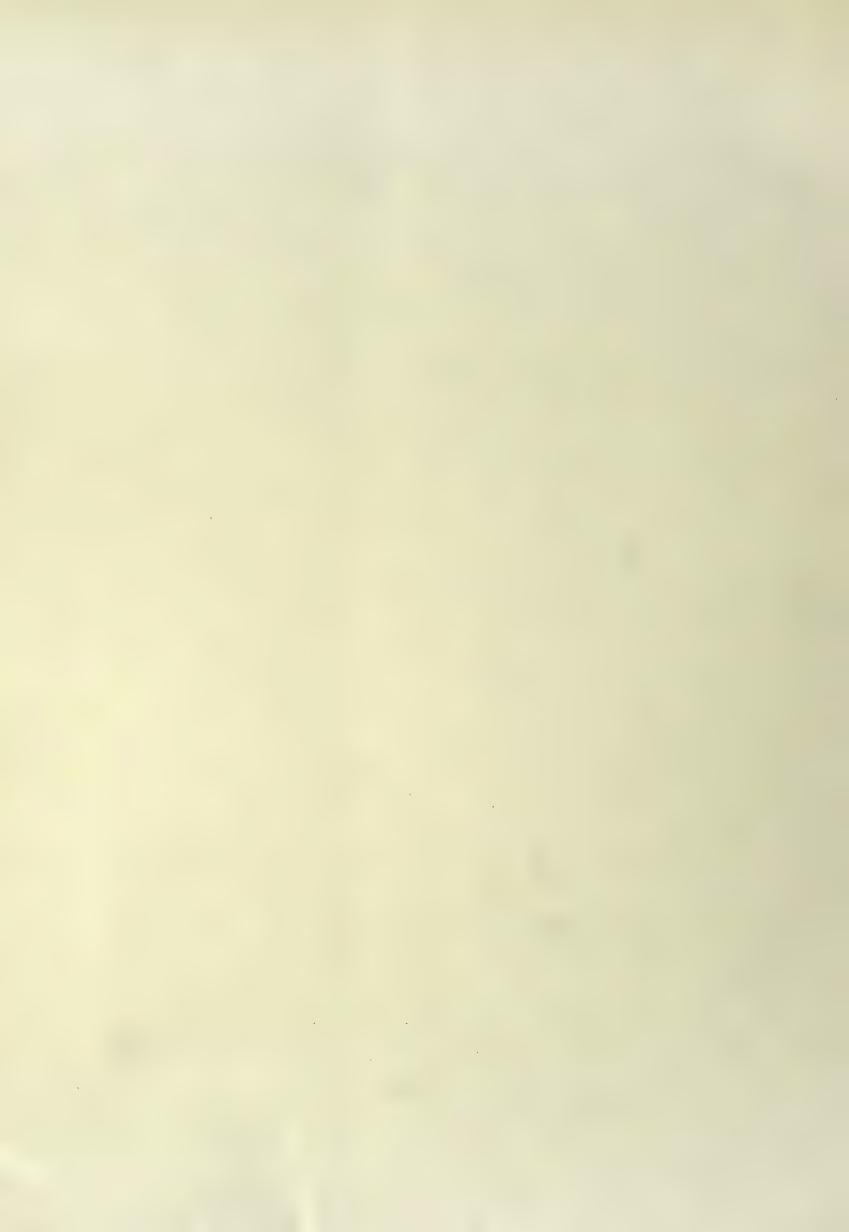
1, 2, Bronze clasp, No. 71. (See p. 69). 3, 4, Details of tripod, No. 72. (See pp. 70 f.).





(1:3)

Tripod of bronze and iron, No. 72. (See p. 70).





1 (3:5)





1, Bronze bowl, No. 74. (See p. 72). 2, 3, Details of tripod, No. 72. (See p. 70).





1 (4:11)



2 (5:11)

1, 2, Bronze bowl, No. 73.



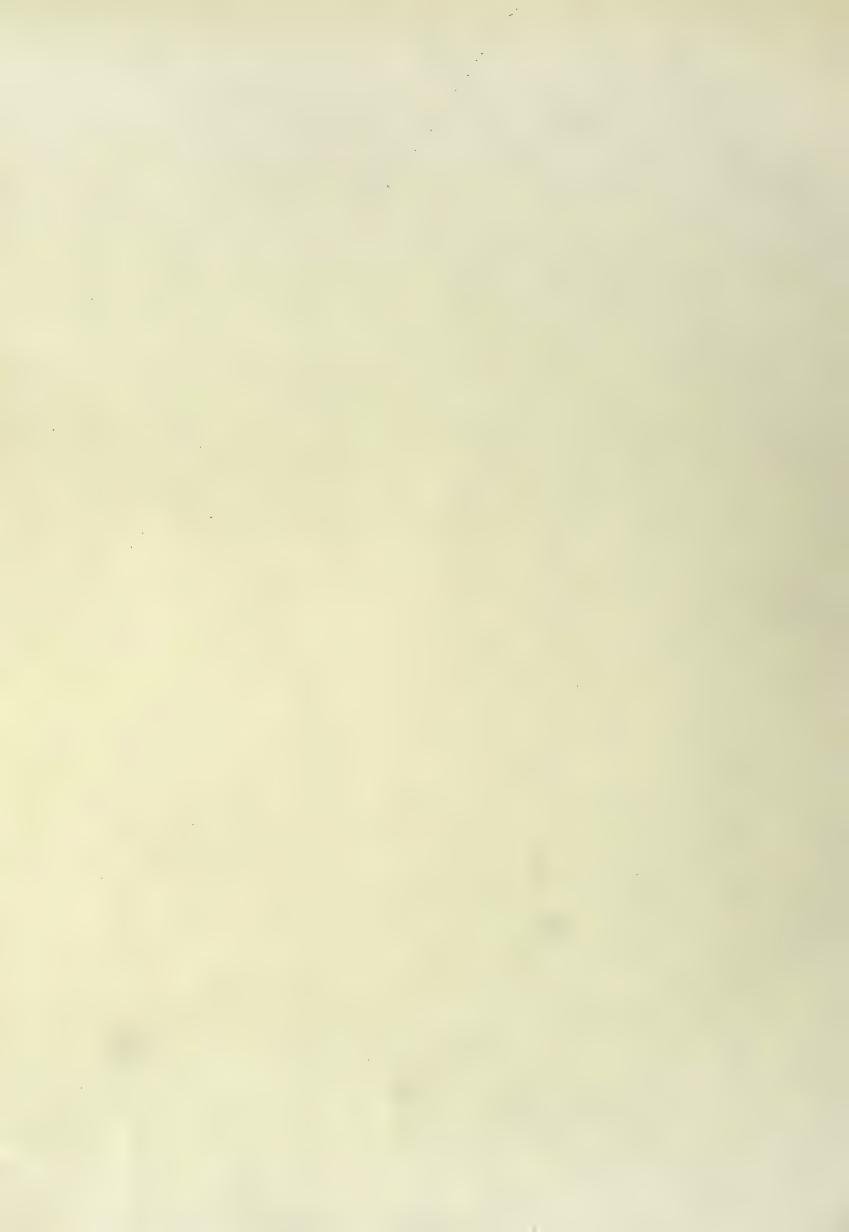


1 (3:10)



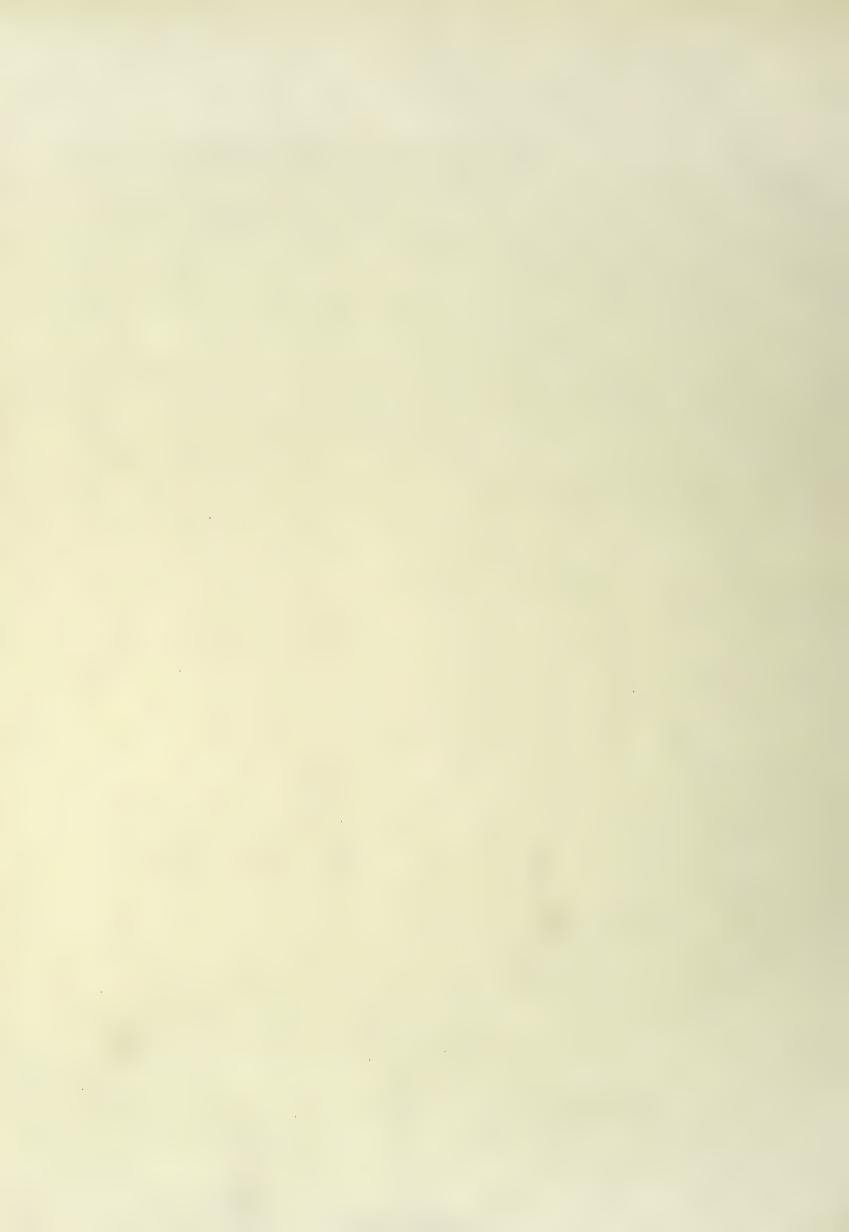
1 (2:3)

1, Bronze cauldron, No. 75. (See pp. 72 ff.). 2, Detail of same. (See p. 72).





1-4, Griffin heads from cauldron, No. 75. (See p. 73).



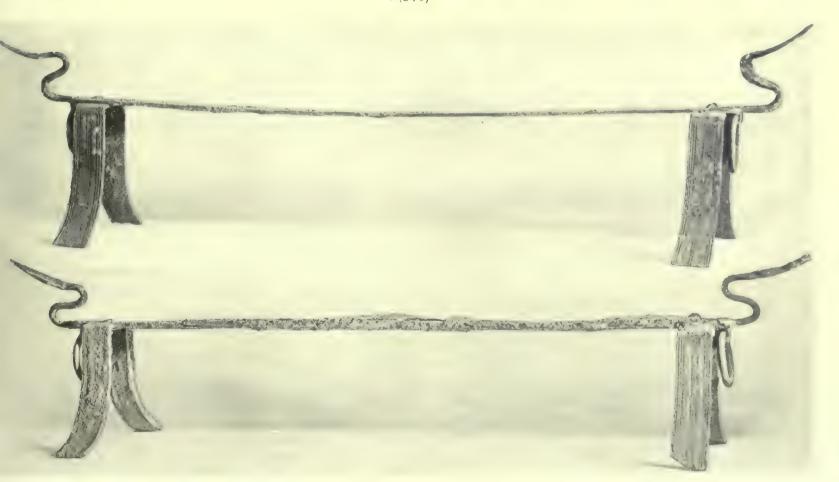




1-3, Details of cauldron, No. 75.







2 (2:7) 1, 2, Bronze craticula, Nos. 76, 77.





1 (2:7)



2 (3:10)

1, Bronze tripod, No. 78. (See p. 75). 2, Bronze cauldron, No. 80. (See p. 77).



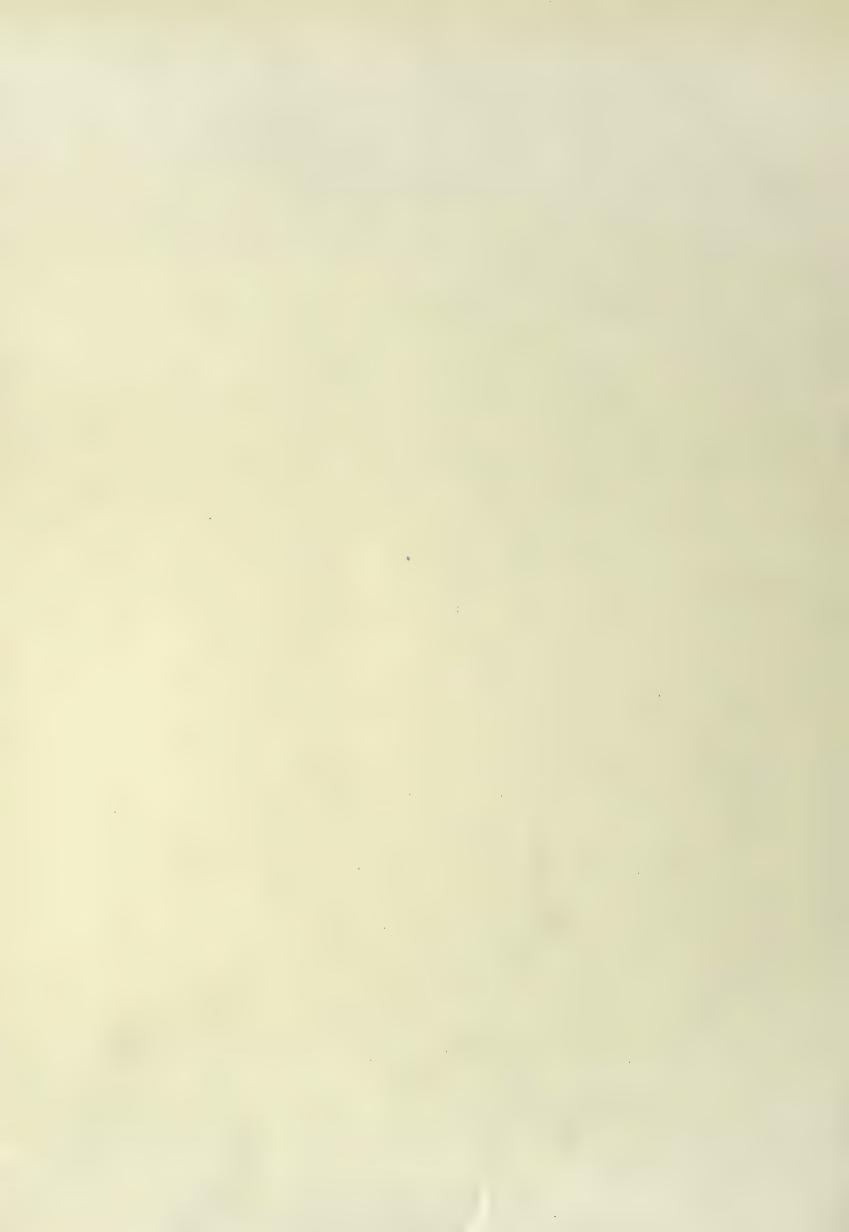


1 (1:4)



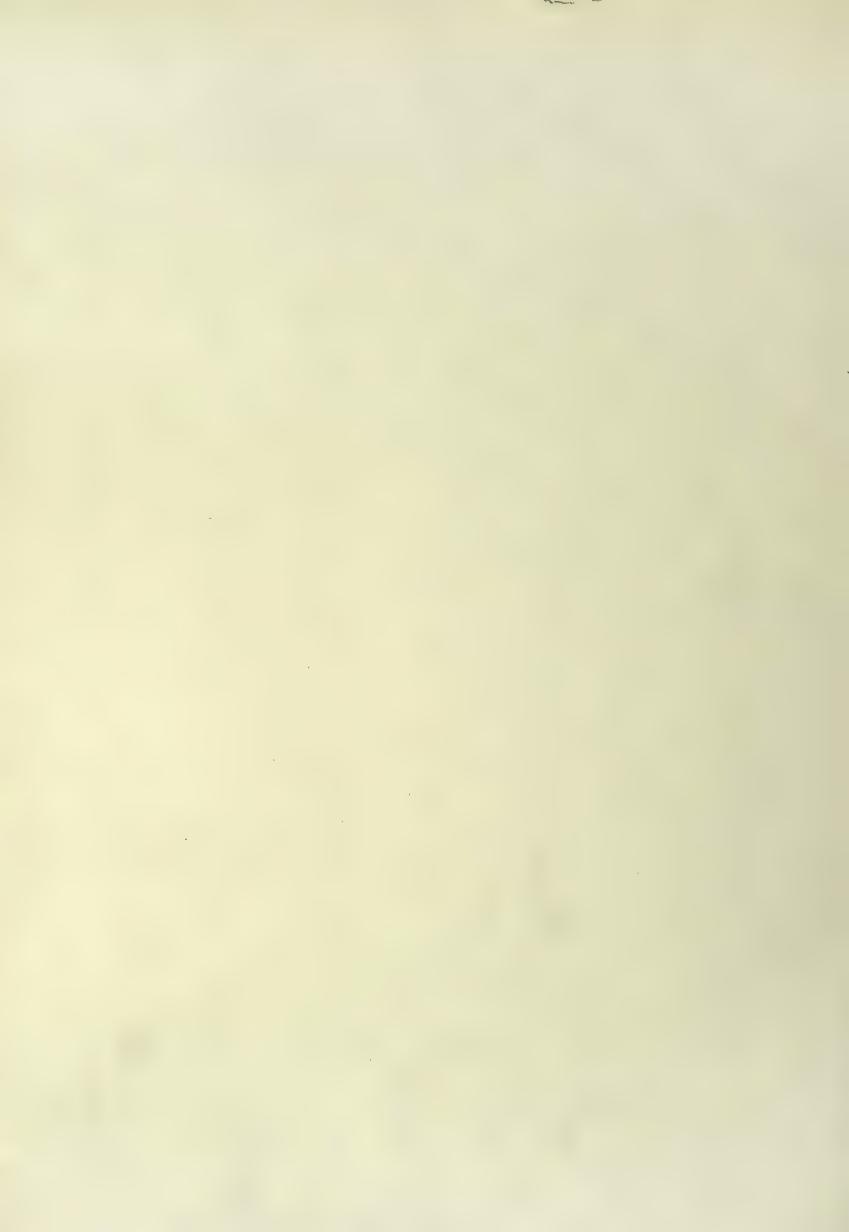
2 (2:7)

1, 2, Bronze situla, No. 79.



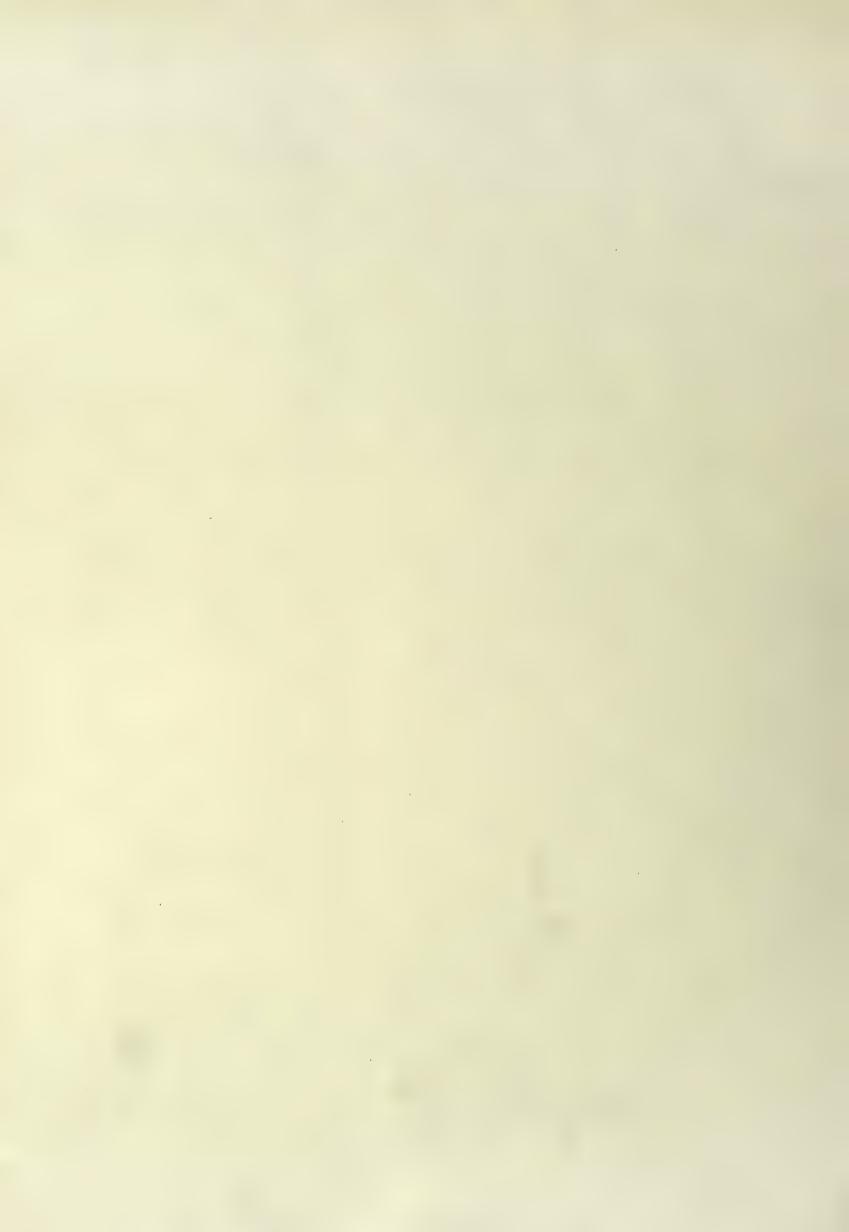


Bronze stand, No. 81 (about 3:11).





Base of No. 81 (about 4:11).

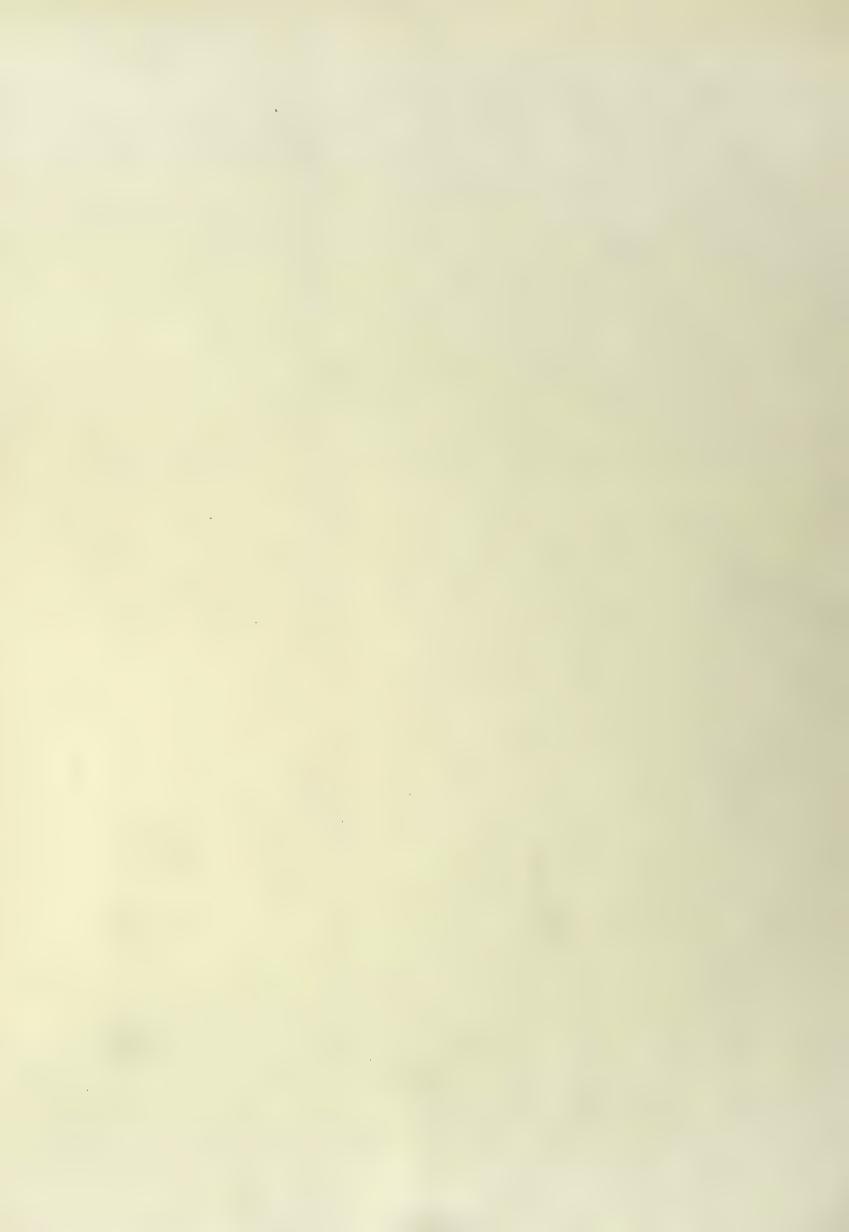


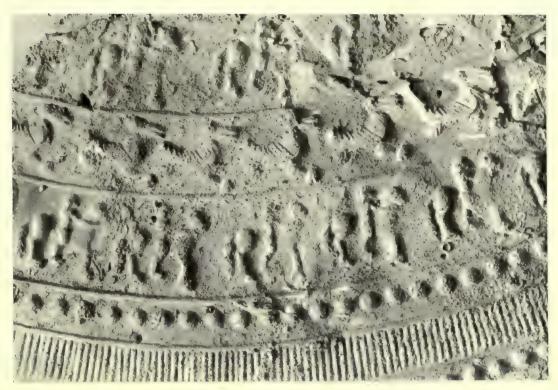


1 (5:6)



2 (3:10) 1, 2, Fragments of bronze shield, No. 82. (See pp. 77 f.).

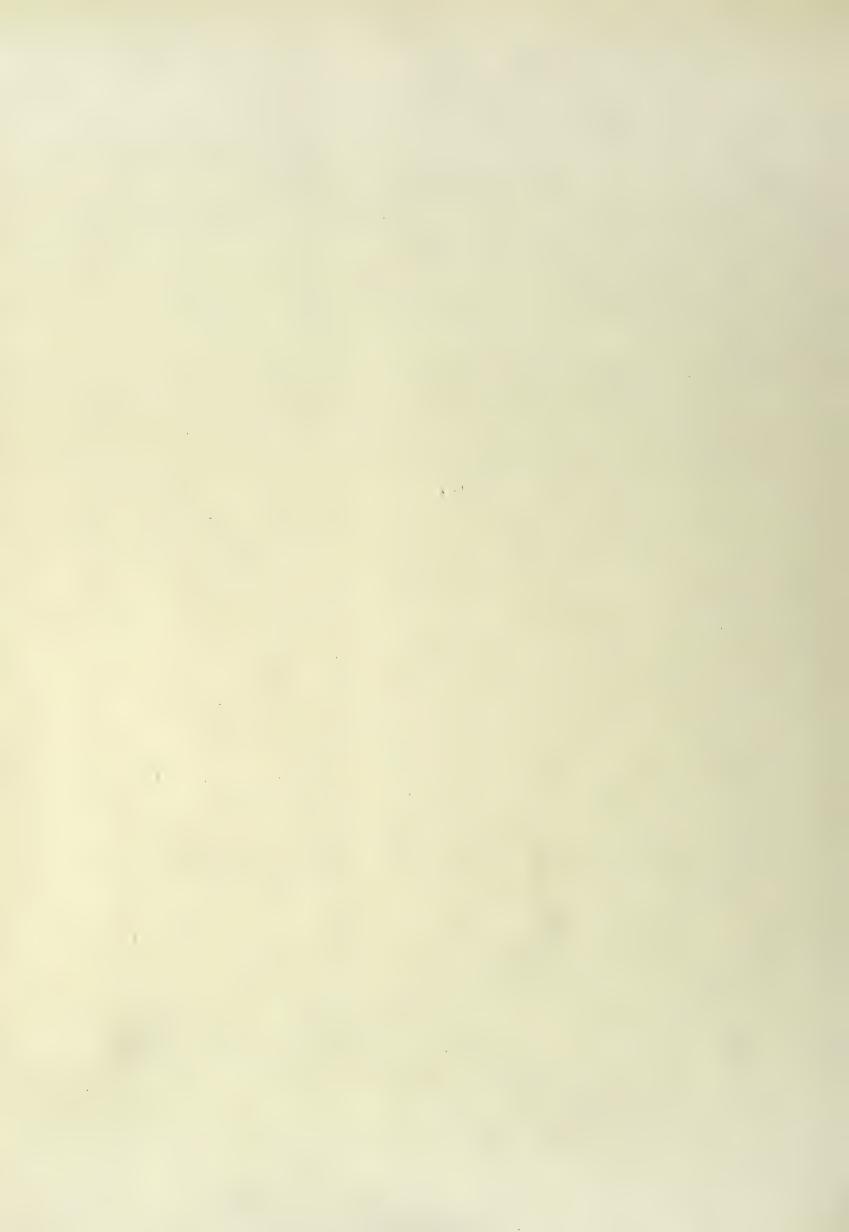




1 (5:6)

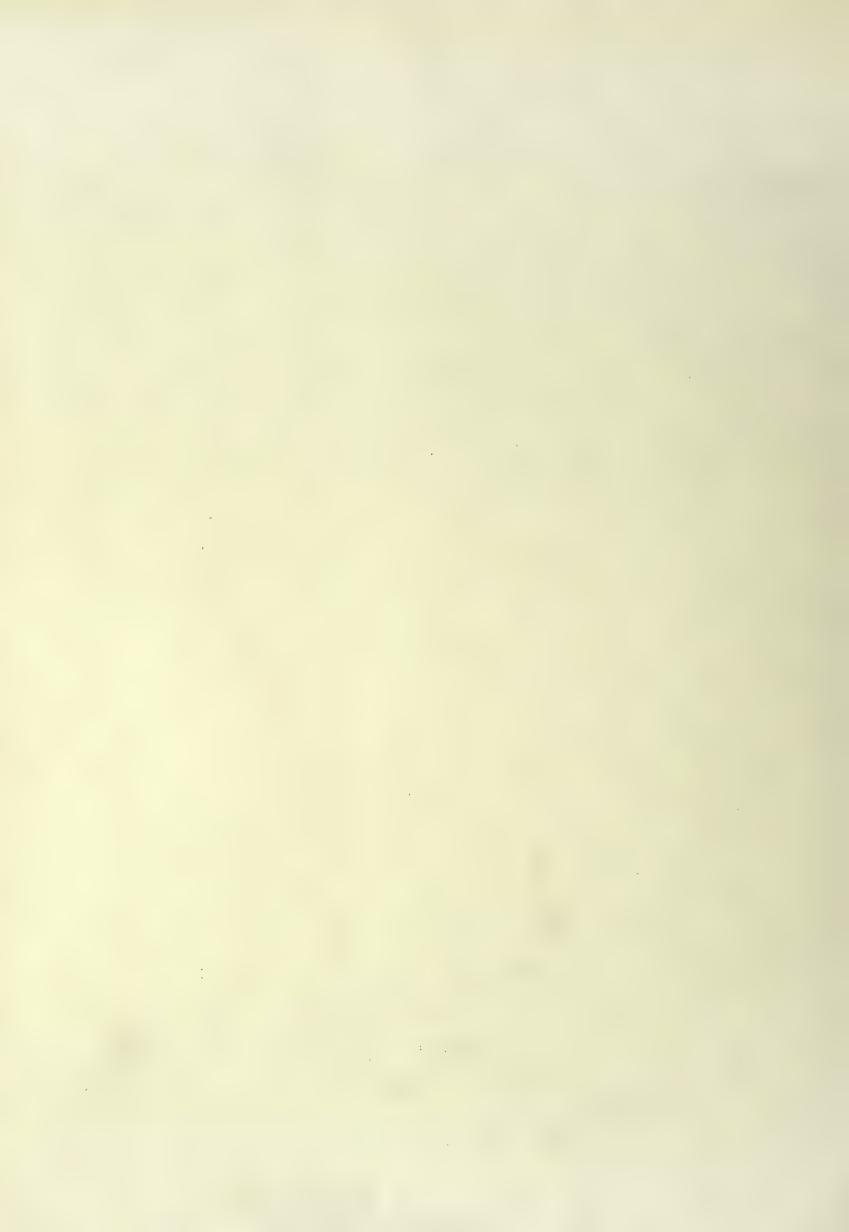


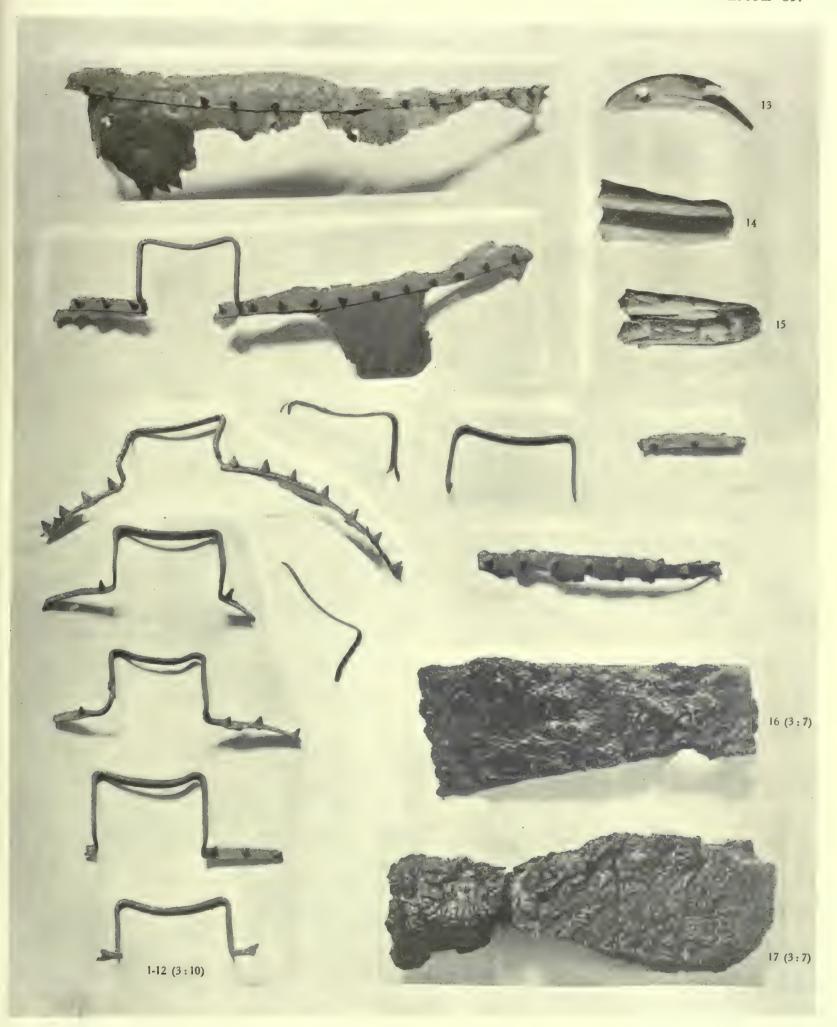
2 (5:6) 1, 2, Details of shield, No. 82.



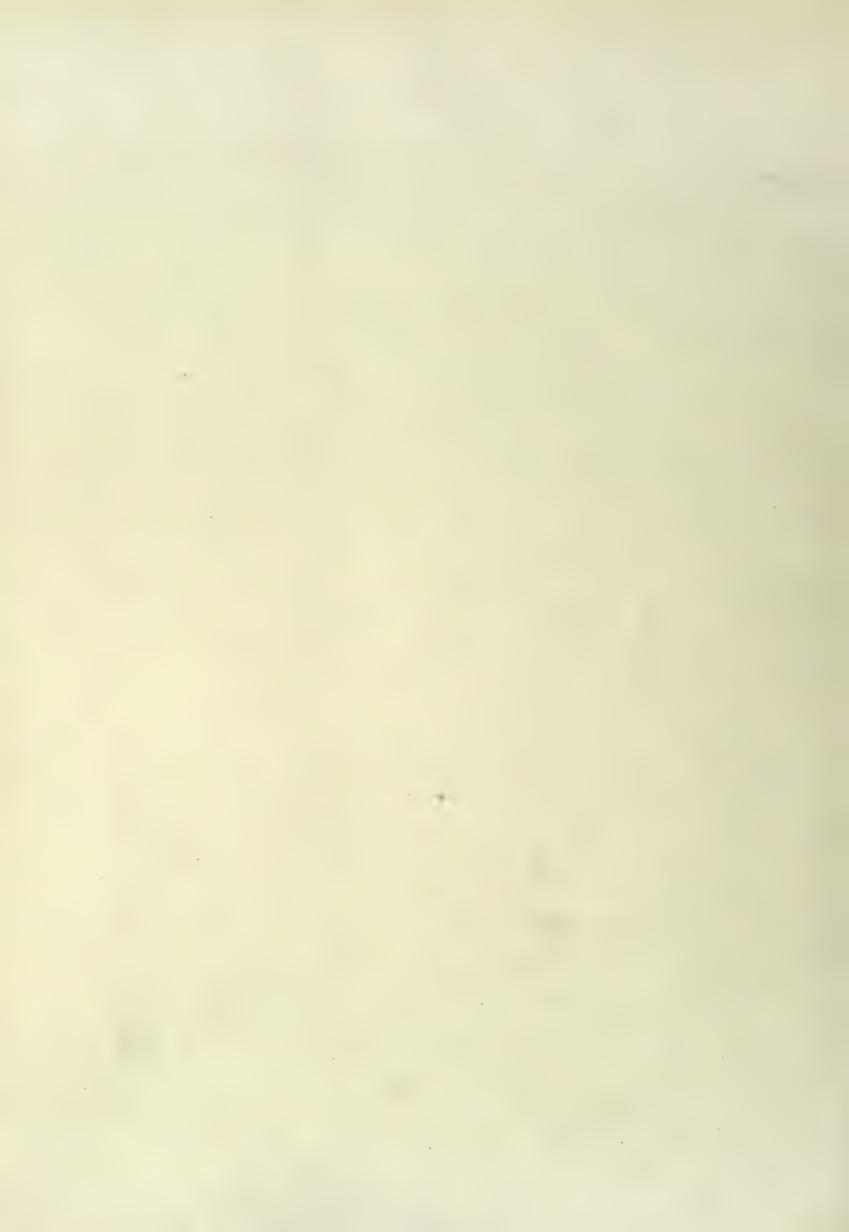


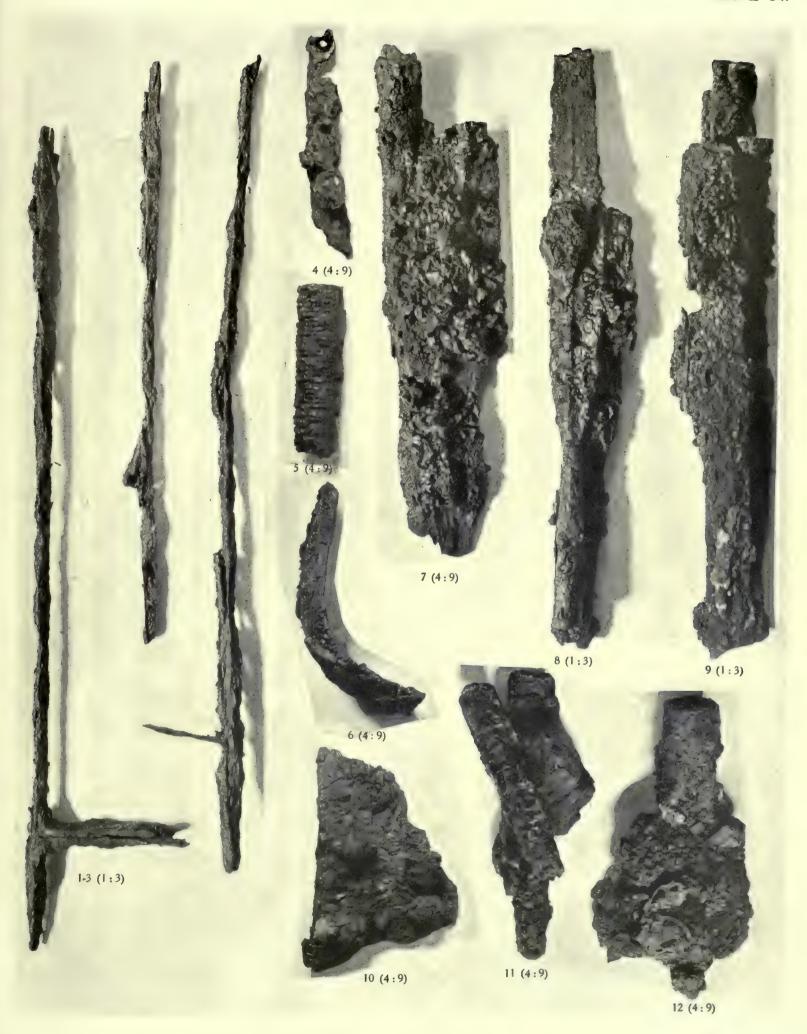
1-4, Bronze rings, No. 86. (See p. 80). 5, 6, Bronze shield handles, No. 84. (See p. 79). 7, Bronze lance head, No. 83. (See p. 79).



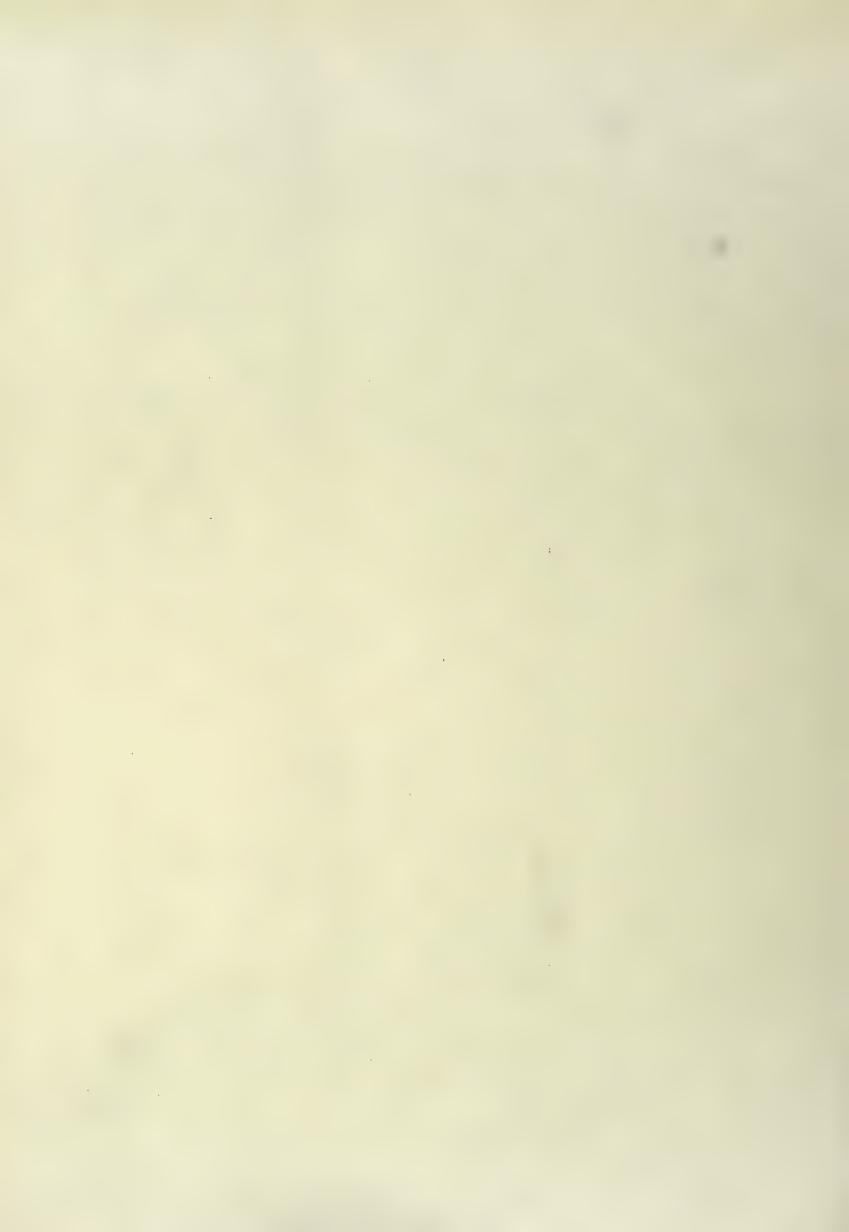


1-12, Fragments of bronze vases, No. 87. (See p. 80) 13-15, Fragments of teeth, No. 88. (See p. 81). 16, 17, Iron implements, No. 89. (See p. 81)



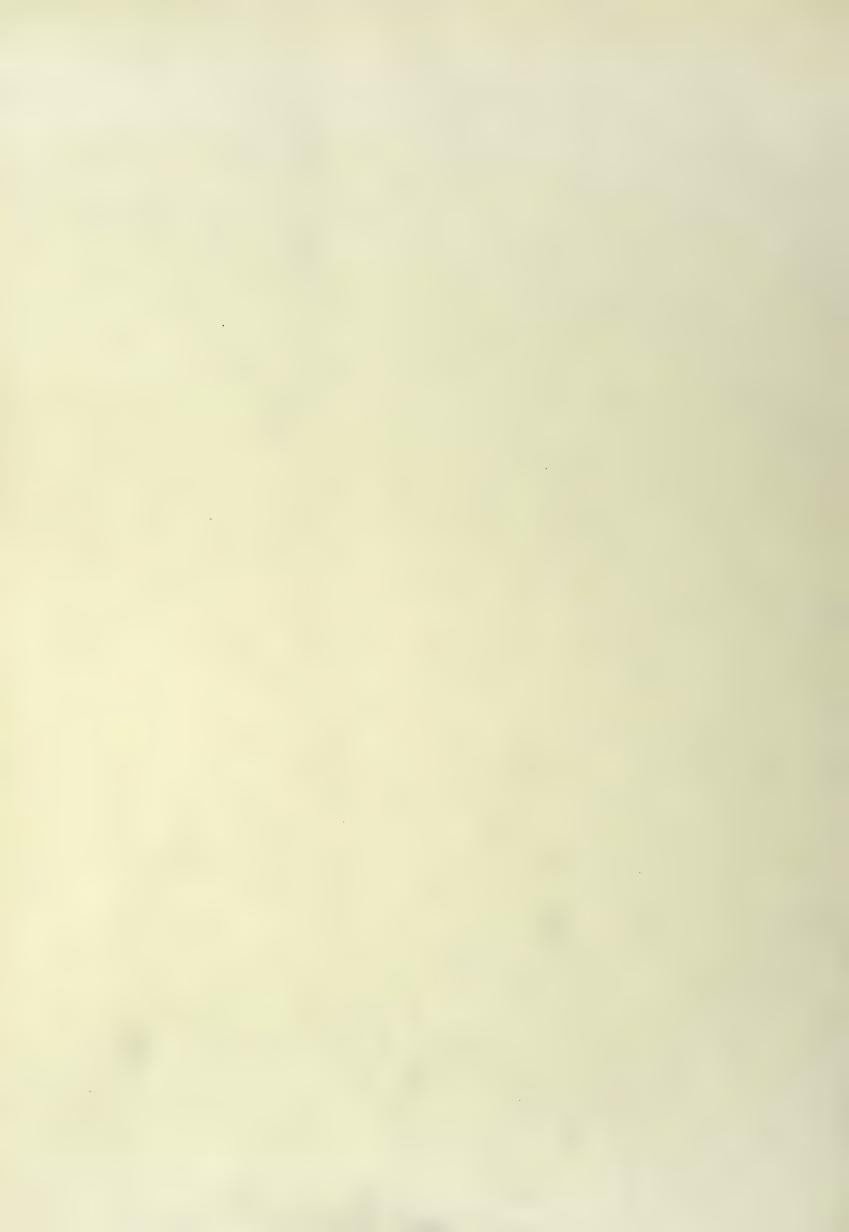


Iron fragments. (See p. 81)



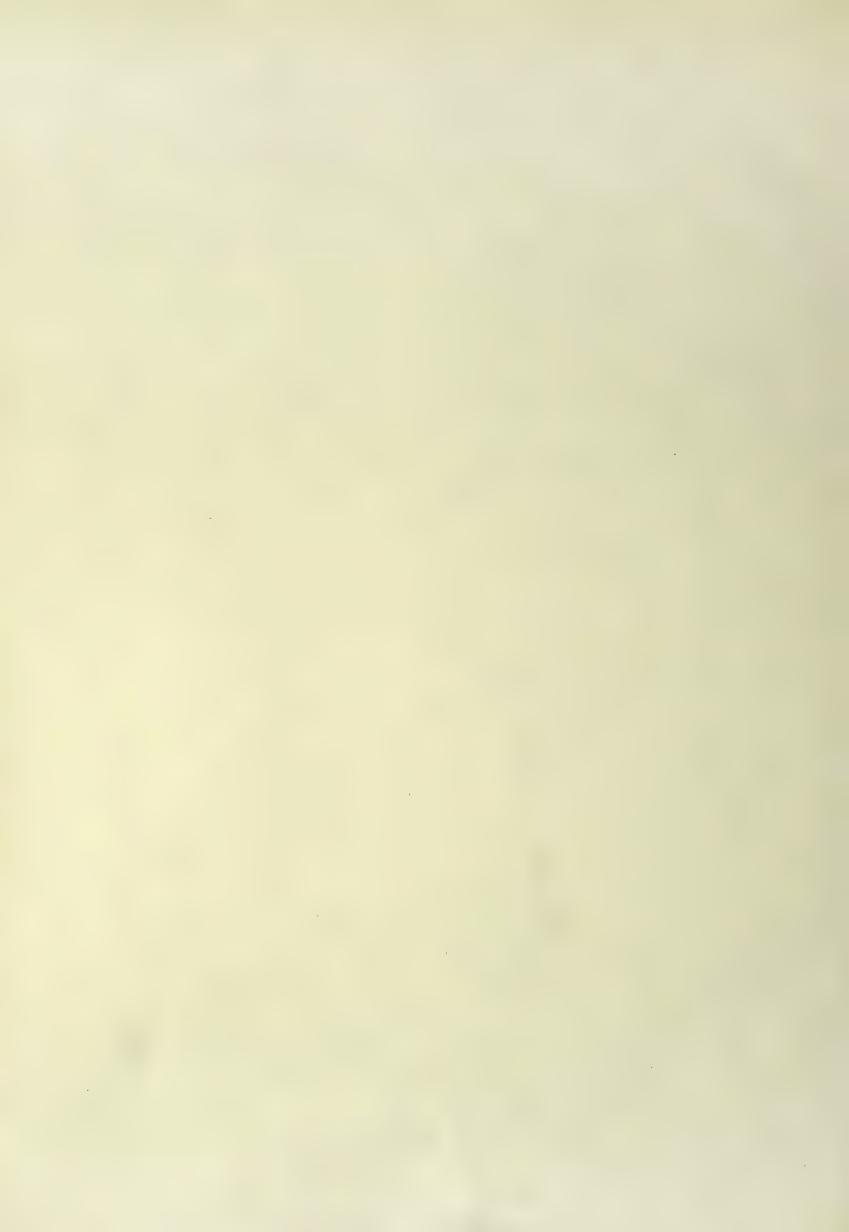


1, 2, Bronze sheath, No. 90.





1, 2, Bronze sheath, No. 91.

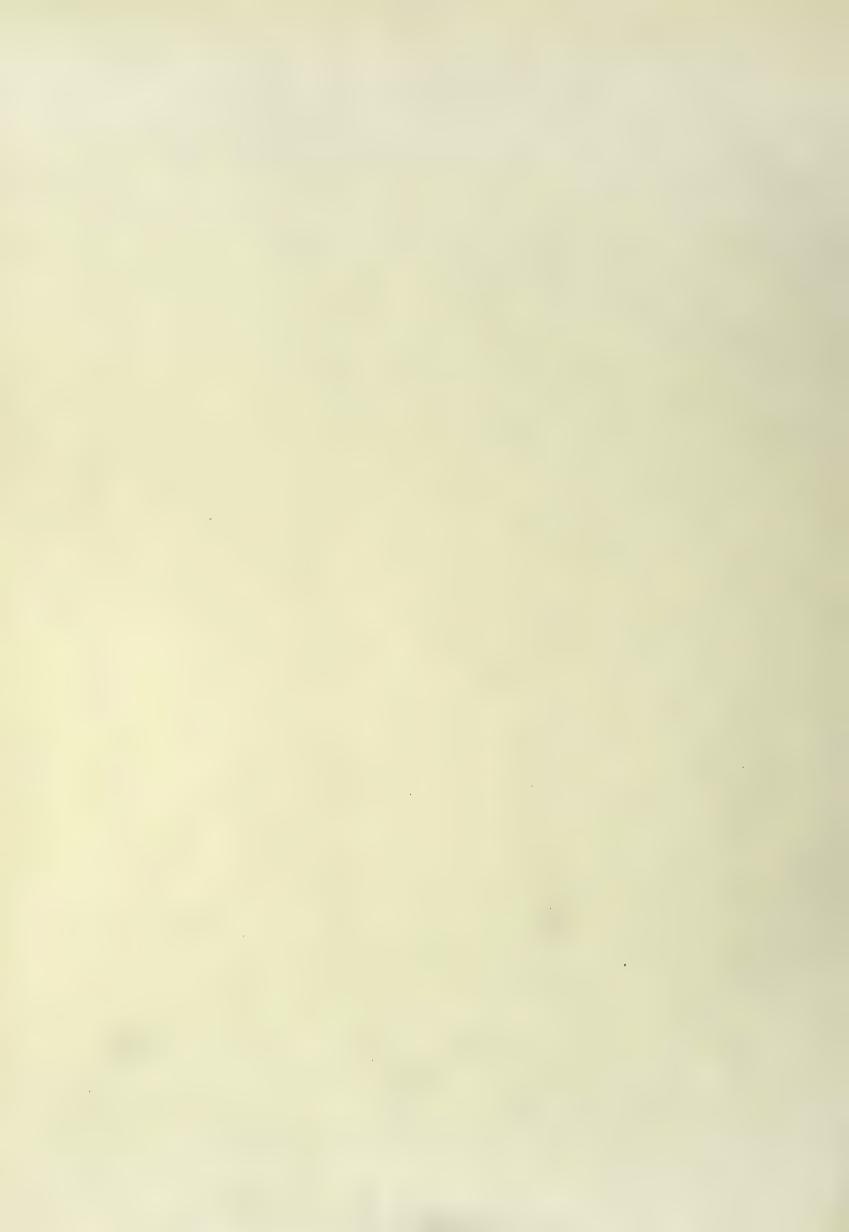




1, 2, Bronze sheath, No. 92.

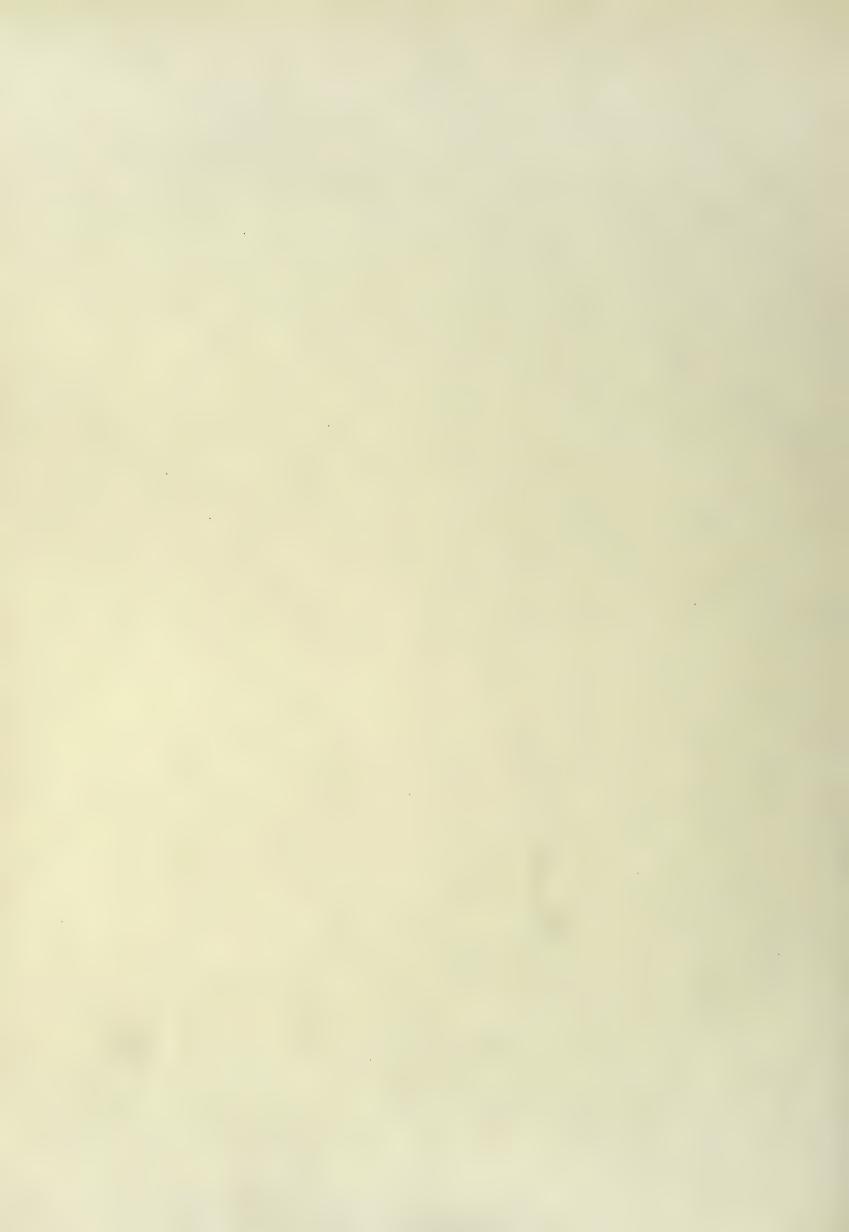
3, 4, Bronze sheath, No. 93.

5, 6, Bronze sheath, No. 94.





1, 2, Bronze sheath, No. 94. 3-5, Bronze sheath, No. 95.

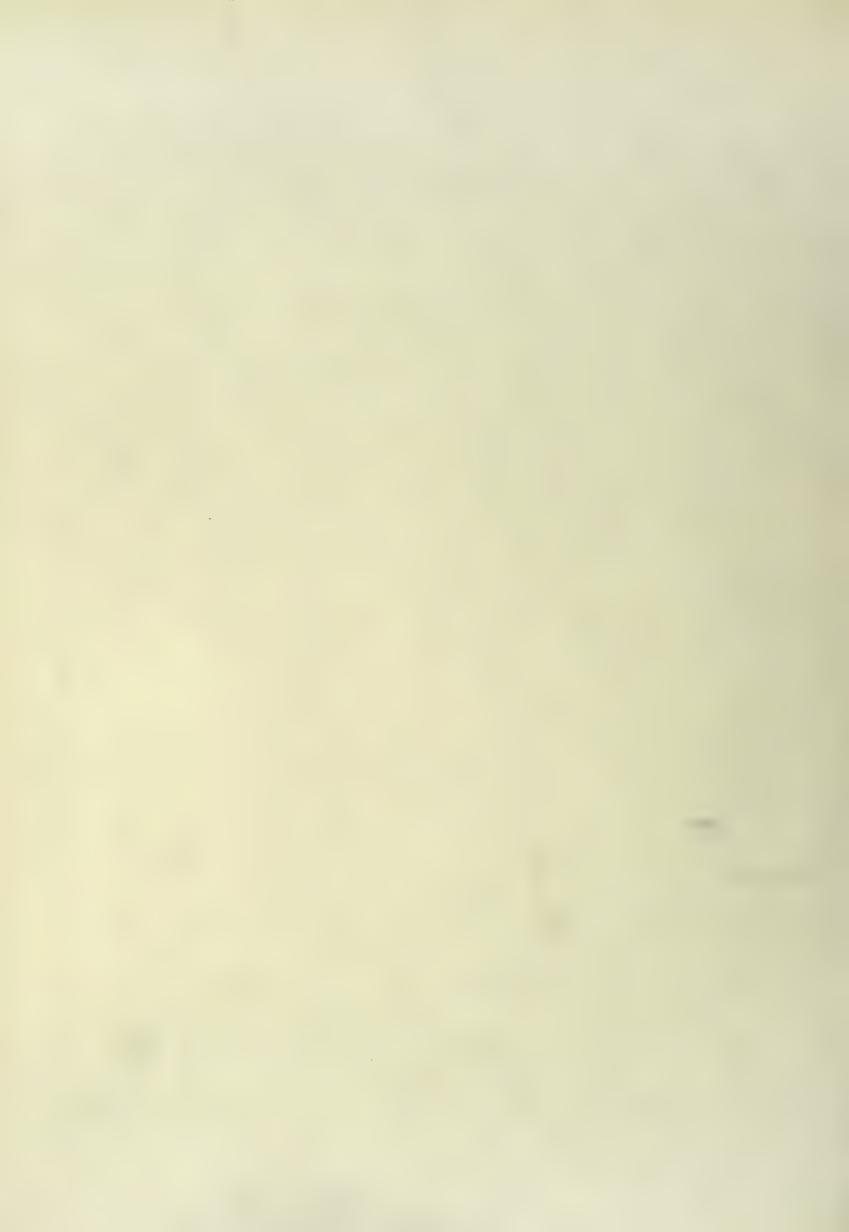




1-9, Wooden fragments (scale 4:7).

10, Glass fragment.

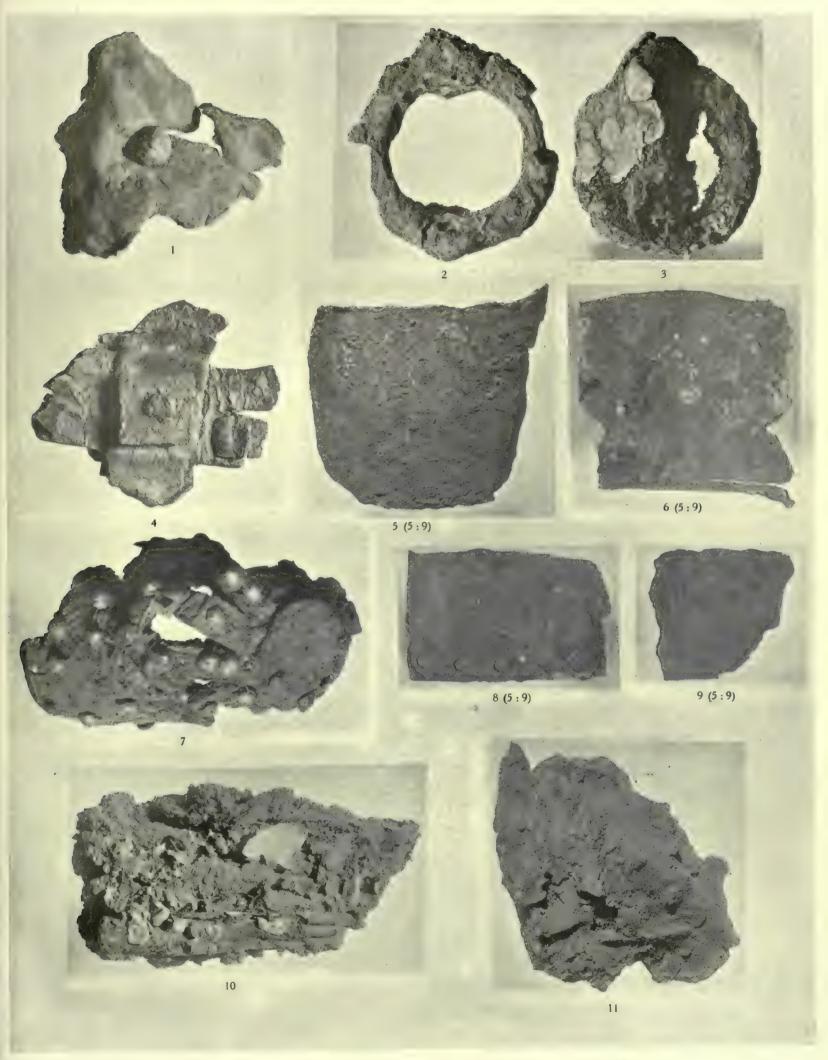
11, 12, Animal bones.





Bronze fragments. (See p. 86).





Various fragments. For Figs. 2, 3, see p. 80. For the others, see p. 87.



## PRAXIAS.

## E. DOUGLAS VAN BUREN.

(PLATES 72-75)

"In the pediment are represented Artemis, Leto, Apollo and the Muses, the setting Sun, Dionysos and the Thyiades; the earliest of the figures were made by Praxias of Athens, a pupil of Kalamis; but as a considerable time elapsed during the construction of the temple, Praxias, as his destiny was, succumbed to fate, and the remainder of the pediment sculptures were executed by Androsthenes, also an Athenian by birth, but a pupil of Eukadmos "1. That is all we are told of the sculptors to whom was consigned the important task of adorning the temple at Delphi when it was rebuilt after its destruction in the early part of the fourth century B. C., for the French excavations have proved that the sculptured groups described in *Ion* v. 184-217 belonged to the earlier, Alkmaionid temple 2, destroyed by earthquake or subsidence of the soil 3.

Although commenced about 371 B. C. the work progressed very slowly, since in the Hymn to Dionysos which was found at Delphi and is dated about 338 B. C. I the God bids the Amphiktions complete the work with all speed I 4. Evidence seems to show that the Eastern pediment was finished before the Western one; but even so, it can hardly have been put in place before 346 B. C. Every trace of these pediment sculptures has so completely vanished, that the only reasonable hypothesis seems that the groups were removed bodily, probably to Constantinople, to adorn some other building 5.

Praxias is known to us from three inscriptions: the first, from Athens, is the dedication by twenty-four men of a statue of Aphrodite, and other references to the names

<sup>&</sup>lt;sup>1</sup> Paus., X, 19, 3.

<sup>&</sup>lt;sup>2</sup> Homolle, Bull. Corr. Hell., XXV (1901), pp. 457 ff.; XXVI (1902), pp. 587 ff.

<sup>&</sup>lt;sup>3</sup> M. F. Courby, Fouilles de Delphes, II (1915), p. 113; E. Bourguet, Les Ruines de Delphes (1914),

p. 183, Fig. 61.

<sup>&</sup>lt;sup>4</sup> Bull. Corr. Hell., XIX (1895), pp. 393-418. <sup>5</sup> Perrot, Hist. de l'Art, VIII, p. 567; E. Reisch,

Oesterr. Jahresh., IX (1906), p. 202.

of these dedicants show that the inscription must be dated between 370 and 360 B. C. <sup>1</sup>. According to an inscription on a base from Oropos, Praxias was the sculptor of a portrait statue of Neoptolemos, the son of Stratokles, dedicated by his son Charias some time between 366 and 338 B. C. <sup>2</sup>. The third inscription must also be placed about 360 B. C., for it occurs on a base in Delos of a statue of Artemis, dedicated by Archippe, wife of Ikarios <sup>3</sup>. A reference to the work of his youth is found in the accounts for the work done on the Erechtheum for the year 407 B. C.: Πραχ[σίας] ἐμ Μελίτη οἰκῶν τὸν ἱ[ίππο]ν καὶ τὸν ὀπισθοφανῆ τ[ὸν πα]ρακρούοντα ΗΔΔ. <sup>4</sup>.

Therefore in the first half of the fourth century Praxias was at work; but how is this to be reconciled with Pausanias' statement that he was a pupil of Kalamis, whose greatest activity lay between 466 and 430 B. C.? <sup>5</sup>. A sculptor who lived and worked until 340 B. C. (since we are told he died before the completion of the temple), could not have studied under a master who lived a hundred years earlier. Yet it is difficult to believe Pausanias gave wrong information about a temple which was well known and where local tradition was strong. Several theories have been proposed to explain this problem; as, for instance, that Pausanias confused the sculptor of the Delphic pediment with an earlier Praxias, the veritable pupil of Kalamis <sup>6</sup>; or that there was a second, later Kalamis who worked in the fourth century <sup>7</sup>. A duplication of well-known artists is an unsatisfactory way of solving chronological puzzles: more credible is the suggestion of M. Homolle that the scribe was at fault in copying the manuscript, and substituted μαθητής Καλάμιδος for the less well-known name of Kallimachos <sup>8</sup>.

Having launched his suggestion M. Homolle went no further, but the theory deserves to be pushed to its logical conclusion, since the reference to Kalamis is chronologically impossible. Kallimachos, an artist renowned for the meticulous precision of his work, for his delicacy and grace 9, made for the Goddess a golden lamp which hung in the Erechtheum, and for which a bronze palm served as a chimney 10. Other works of his were a seated statue of Hera called " the Bride " in her temple at Plataea 11, and " a group of Spartan girls dancing, a work of faultless technique, which has, however, lost all charm by over-elaboration " 12; furthermore, a pretty story credits him with the invention of the Corinthian capital 13. He was, apparently, a younger contemporary of

<sup>&</sup>lt;sup>1</sup> I. G., II, 3, 1208.

<sup>&</sup>lt;sup>2</sup> I. G., VII, 430.

<sup>&</sup>lt;sup>3</sup> Bull. Corr. Hell., XV, p. 118. For a discussion of these dates see: E. REISCH, Oesterr. Jahresh., IX (1906), pp. 204 f.

<sup>&</sup>lt;sup>4</sup> I. G., I, 324, c. A somewhat hazardous restoration of I. G., I, 324, d, gives: Πραξίας ἐμ Με]λίη [οἰκῶν τὸν νεανίσκον] τὸν τοὺς....

<sup>&</sup>lt;sup>5</sup> STUDNICZKA, Kalamis (1907), p. 80.

<sup>&</sup>lt;sup>6</sup> Frazer, Comm. Paus., X, 19, 4.

<sup>&</sup>lt;sup>7</sup> E. Reisch, op. cit., p. 208.

Bull. Corr. Hell., XXVI (1902), pp. 634 ff.
 VITRUVIUS, IV, 1, 10; PLINY, Nat. Hist., XXXIV,

<sup>92;</sup> DION. HAL., de Isocr., p. 52 R.

<sup>10</sup> Paus., I, 26, 6.

<sup>11</sup> Paus., IX, 2, 7.

<sup>12</sup> PLINY, Nat. Hist., XXXIV, 92.

<sup>13</sup> VITRUVIUS, IV, 1, 10.

Kalamis, with whom his name is coupled by Dionysius of Halicarnassus, and he worked at the end of the fifth century, for the statue of Hera was dedicated about 425 B. C. <sup>1</sup>, and the golden lamp cannot have been placed in the Erechtheum before the completion of the sanctuary in 408 B. C. Evidently he was a skilful worker in metal, but his desire for precision and perfection of detail resulted in over-elaboration and a stilted conventionality, characteristics which we should bear in mind when trying to rediscover his work, a necessary preliminary to the study of his pupil Praxias who, the accounts of the Erechtheum show us, first attracted notice as one of the many young artists engaged on the decoration of that great sanctuary.

Numerous authorities have sought to prove that the Column of the Dancers at Delphi was identical with the Saltantes Lacaenae of Kallimachos, but M. Homolle believes it to be a copy of the noted Caryatides of Praxiteles — a copy set up by Asinius Pollio when he carried off the original to Rome<sup>2</sup>. The maidens certainly appear too natural and vivacious to suit the academic style of Kallimachos, whose rigid adherence to the archaic tradition precluded any lifelike and exuberant motion.

There is, however, a relief which answers better to what we believe his style must have been — a relief, moreover, inscribed KAAAIMAXO∑ EHOIEI (Pl. 72, Fig. 1) <sup>3</sup>. On it is depicted Pan advancing towards the right followed by three nymphs in the processional scheme beloved of archaic art. The nymphs advance daintily, each carefully holding a fruit or other small object and wearing elegant garments the edges of which fall into elaborate swallow-tail folds. Many doubts have been expressed as to the authenticity of the inscription; but it seems to be contemporaneous with the relief, which must be considered a Neo-Attic copy of a genuine work of Kallimachos. A cast in Bonn from an unknown original gives an almost exact replica of the third nymph of the Capitoline relief, except that in this case she holds a cornucopiae in her left hand, and must therefore typify Tyche <sup>4</sup>.

Evidently his style was such that it could easily be adopted for ornamental objects, altars, candelabra, bases — combined and completed by rich floral motives which his toreutic skill had enabled him to bring to perfection in the bronze palm tree and the Corinthian capital. Another work which has been attributed to him is the altar found on the Athenian Acropolis of the Four Gods, Athena, Hephaistos, Hermes and Zeus 5. The goddess stands with her feet firmly planted on the ground, in her right hand her lance and in her left her helmet with a plume which terminates in a conventional spiral.

<sup>&</sup>lt;sup>1</sup> H. S. Washington, A. J. A., 1891, pp. 390 ff. <sup>2</sup> Th. Homolle, Rev. Archéol., V (1917), pp. 1-67.

<sup>&</sup>lt;sup>3</sup> STUART JONES, Cat. Capitoline Mus., I, Pl. 61, pp. 264 f.

<sup>&</sup>lt;sup>4</sup> HAUSER, Die Neu-Attischen Reliefs (1889), p. 59, No. 81.

<sup>&</sup>lt;sup>5</sup> Furtwaengler, Masterpieces, p 439; Mon. dell'Inst., VI, Pl. 45; Hauser, op. ctl., p. 34, No. 43 a.

The swallow-tail folds of her drapery are strongly accentuated, a detail even more marked in the case of Hephaistos. The other two figures are partially obliterated, but there are still traces of a beautiful Lesbian kyma which ran round below the figures. These deities are well poised and well developed, and their archaism is less an actual fact than a voluntary self-limitation to an earlier tradition, a dangerous example which, in the hands of less able pupils, developed into mechanical conventionality.

For these figures are the prototypes of a whole series of models, taken over by the Neo-Attic School, adapted for decorative purposes, and copied and recopied until they became mere meaningless stock figures, devoid of any grace or charm. Hauser, in his important book, Die Neu-Attischen Reliefs (1889), has enumerated all the examples of the Neo-Attic School, and arranged them into earlier and later groups. He considers that most of the types go back to earlier originals, but by dint of study we can go even further and show their derivation from certain definite masters of the transitional period, foremost of whom was Kallimachos.

The important monument known from its provenance as the Corinthian Puteal was brought to England about 1819, but all trace of it was lost at some period before 1865. Its date is a much debated subject 1. Furtwaengler ascribes it to Kallimachos or his circle<sup>2</sup>, whilst Hauser considers it archaistic and dates it at about 350 B. C.<sup>3</sup>. It has been suggested that the original was the silver altar in the Heraion depicting the marriage of Hebe and Herakles, but as the puteal itself has disappeared it is hard to determine the date from possibly inaccurate drawings. Here, however, the bas-relief from Kertch, now in the Odessa Museum, comes to our aid, for although incomplete and damaged, it is unrestored and the photograph gives a good idea of its actual condition. M. S. Reinach, in his able discussion of the monument 4 (Pl. 73, Fig. 2), convincingly proves that it cannot be of Roman workmanship, and that the details which Hauser terms " late ", — the swallow-tail folds and the recurved wings on Hermes' bare ankles — are found in genuine archaic works. He maintains that it is Attico-Ionic work of about 470 B. C. But the bodies, especially that of "Peitho", appear too well modelled for such an early period, and he himself mentions that the ivory plaque from Koul-Oba, which he cites as exemplifying the use of swallow-tail edges to drapery and recurved wings on unshod feet, may be dated fairly exactly about 430 B. C. It is probable, therefore, that the original was by Kallimachos, possibly a round base or puteal, sculptured about 430-400 B. C., or even that the silver altar itself was his work, for such an object would be well within the range of the skilful metal-worker. The figure of Hermes should be compared with the Pan of the Kallimachos relief; the attitude is identical, but in the

<sup>&</sup>lt;sup>1</sup> Michaelis, J. H. S., VI (1885), pp. 46 ff.

<sup>&</sup>lt;sup>2</sup> Masterpieces, p. 441.

<sup>3</sup> Die Neu-Attischen Reliefs, p. 162.

<sup>&</sup>lt;sup>4</sup> Mon. Piot, II (1895), pp. 57 ff., Pl. 7.

latter case the copyist has emphasised the muscles and softened the archaic rigidity of pose.

The Kertch relief must be a good copy, perhaps almost contemporaneous, whereas the Corinthian Puteal is the rather freer rendering of a later copyist.

Akin to these deities is the goddess depicted on the short side of a strange monument from Epidauros who pours wine from an oinochoe in her raised right hand. Her long chiton is covered by an over-mantle which falls in elaborate swallow-tail folds; she wears a stephane and three long curls hang down on to her breast on either side. M. Svoronos has pointed out the resemblance to the Hebe of the Corinthian Puteal, and further shows that the monument was the work of some Hellenistic artist who was strongly influenced by Phidias, Praxiteles and Paionios in portraying the three other figures of the relief, and so produced a work where models from different epochs were set in juxtaposition. Besides those great masters of the finest period, this adapter evidently drew inspiration from the old-world types of Kallimachos, and testified his admiration by introducing one of his creations among models derived from the work of more progressive artists.

The Hermes and Athena of the Acropolis altar are reproduced on an oblong relief in the Villa Albani <sup>2</sup> (Pl. 74); but here Athena holds her lance in rest and follows Hermes who moves towards a small square altar on which are leaping flames. Behind Athena comes Apollo, his hair bound with a laurel wreath, and holding his bow and arrow. A small scarf floats from his arms in quite impossible swallow-tail folds. Lastly Artemis advances, her bow and quiver on her shoulder, holding a great torch in her right hand and raising her garment daintily with her left. All four divinities walk rapidly forward with their heels raised from the ground, and each holding their implement with the thumb and first finger only, whilst the other three fingers are extended straight out. This was evidently considered the height of elegance in Kallimachos' day, for Xenophon, a contemporary (circa 429-367 B. C.), describing the banquet of the Median King, writes: "Now the cupbearers of those kings perform their office with fine airs; they pour in the wine with neatness and then present the goblet, conveying it with three fingers, and offer it in such a way as to place it most conveniently in the grasp of the one who is to drink "3.

The two last deities are shown on a fragmentary relief from Smyrna now in the Berlin Museum 4, good, careful work where the figures walk firmly on the soles of their feet. These two gods with the addition of Hermes and the altar reappear on a round

<sup>&</sup>lt;sup>1</sup> J. N. SVORONOS, Athener Nat. Mus., II, pp. 418 ff., No. 1425; Pls. 68, 126.

<sup>&</sup>lt;sup>2</sup> Zoega, B. R., II, Pl. 100; Hauser, op. cit.,

p. 34, No. 43.

<sup>&</sup>lt;sup>3</sup> Cyropaedia, I, iii, 8, tr. W. Miller, Loeb Library. <sup>4</sup> Berlin Cat. No. 893; HAUSER, op. cit., p. 34, No. 42.

base in the Capitoline Museum, but it has been much worked over and the accuracy of detail is lost. Better in that respect, although much effaced, is a fragment in the Archaeological Museum of Milan 2 where only Athena and Hermes are preserved, and these two deities with Artemis are portrayed on the relief in the Hermitage 3. Perhaps the best example, however, is a round base in the Torlonia Collection 4 (Pl. 72, Fig. 2) with Zeus, Athena and another goddess in chiton and overmantle who holds a sceptre. probably Hera. Very fragmentary is the relief of Athena and a god walking to left in the Museo Chiaramonti 5, and also Athena alone in the Capitoline Museum 6.

Interesting in this connection is the damaged slab found on the Athenian Acropolis and published by Ada von Natoliczka 7, where on one side appears Athena, who, save for the addition of great wings, a very unusual feature, is an evident copy of the Athena of the Altar of the Four Gods. The details lack the crispness of the original, and the more modern rendering of the aegis and shoulders seems to indicate that the model was already blurred when the copy was made. But the chief value of the slab, as the author points out, is that it proves " that we must seek the prototypes of Neo-Attic art above all in Athens ". Furthermore, the slab is important on account of the second side, where, in very high relief, Athena steps forward, raising her robe with her left hand, for here is an indication of the figures in the round of this School. This Athena reveals the source of inspiration of such statues as the Artemis from Pompeii 8 and the Herculaneum Athena 9.

These types with certain modifications are found again on a base round which the gods walk in procession 10 (Pl. 72, Fig. 3). Here Athena holds her lance upright as on the Acropolis altar, but Apollo, instead of his bow and arrow, holds the kithara. Between them is Herakles with bow and club, the lion's skin covering his head and knotted on his chest; the lion's tail terminates in the same conventional spiral as the plume of Athena's helmet; the garments fall into swallow-tail folds, but the gods walk firmly on their feet and their gait is dignified and well balanced, showing that the work is a faithful copy of a good early model. Yet the change in Apollo's attitude and the

1 STUART JONES, Cat., Salone 1a, Pl. 65; HAUSER, op. cit., p. 34, No. 41.

<sup>2</sup> Espérandieu, Mon. Ant. figurés du Mus. Archéol.

de Milan, I, p. 11, Fig. 3.

<sup>4</sup> VISCONTI, Cat. Torlonia (1883), No. 501; HAUSER,

op. cit., p. 35, No. 44.

6 MATZ-V. DUHN, No. 3641.

BRUNN-BRUCKMANN, Pl. 356.

9 Naples Museum, No. 6007. Comparetti e De Pe-TRA, La Villa Ercolanese dei Pisoni (1883), Pl. xix, No. 1.

<sup>3</sup> L. R. FARNELL, J. H. S., IX (1888), p. 39; S. REINACH, Rep. Reliefs, III, p. 490; C. GEDEONOV, Mus. of Ancient Sculpture, (Petrograd, 1911), No. 330.

<sup>&</sup>lt;sup>5</sup> AMELUNG, Vatican Cat., I, Pl. 32, No. 10; HAUSER, op. cit., p. 61, No. 87.

<sup>&</sup>lt;sup>7</sup> Oesterr. Jahrb., xvii (1914), pp. 121-132, Pl. 1.

<sup>10</sup> Owing to cleaning and restoration this base has lost much of what little grace and precision the Roman copyist was able to reproduce. Nevertheless these divinities have a certain affinity with those of the Corinthian Puteal where, also, the gods are nude, and the Hera of the base closely resembles the goddess who precedes Hermes on the earlier work. Roccheggiani has reversed the design, and Moses follows him in this, and furthermore bestows a beard upon Herakles! ROCCHEGGIANI, Raccolta di Cento Tavole, Pl. 100; Moses, Vases, Altars etc., Pl. 146; STUART JONES, Cat. Capitoline Museum, Pl. 29, p. 106.

introduction of Herakles lead us into a new series of monuments, closely connected with, but more advanced than the work of Kallimachos.

For both Apollo, without the kithara, and Herakles just as he is represented on the base, appear again in the group of monuments illustrating the Theft of the Tripod! in which Herakles bears off the tripod which Apollo seizes with his right hand in the hope of retaining his property. One of the best known examples of the subject is the Dresden Base 2, where all the characteristics previously noted are strongly marked, but the copyist has exaggerated the peculiarities of treatment; the flesh is rendered with extreme softness, the figures advance on tip-toe, and the details are so stylised that they form merely a pleasing decorative motive. The other sides depict a Dionysiac subject; in one instance a priest and priestess adorn the tripod with sacred fillets; in the other the priestess is engaged in the same action while Dionysos looks on. This Dionysos is obviously derived from the Zeus of the Torlonia base, the same pose with the weight resting on the left leg, the same enveloping mantle, drawn tightly round the outline of the limbs by the bent arm resting on the left hip. The sceptre has been transformed into a thyrsos, and the simple dignity of the earlier type has developed into the statuesque pose of the later creation. Statuesque, indeed, the Dionysos certainly is, for the treatment of the drapery recalls the Dionysos Sardanapalos, and the motive of the clinging drapery was afterwards reproduced with fine effect in the Sophocles of the Lateran 3.

A link between the earlier monuments and the Dresden Base is formed by a series of reliefs portraying Dionysos. The best and earliest of these is the fragment of a vase in the Museo Barracco 4 where the figure is preserved down to the knees only, but the work is excellent, the details sharply marked. The god, in a χειριδωτὸς χιτών, with a peplos fastened on the right shoulder, moves towards the left, carrying his thyrsos in his left hand. More complete is the triangular base from Praeneste 5, for the god walks firmly on the soles of his feet, and moreover the ornamentation is very near to the Dresden Base, for here we have winged figures at the angles with rosettes filling the spaces under their curved wings. The fragment in the Collection Duval in Morillon 6 again shows the upper half only, whilst that from Tralles 7 gives the lower half. In all these examples the swallow-tail folds, the mantle drawn tightly round the lower limbs and the treatment of the hair recall the earlier works. Furtwaengler saw in the Dresden Base a copy after

<sup>&</sup>lt;sup>1</sup> Stephani, C. R., 1868, p. 47, Nos. 78-84, enumerates the examples.

<sup>&</sup>lt;sup>2</sup> Brunn-Bruckmann, Denkmaeler, Pl. 150.

<sup>3</sup> ARNDT-BRUCKMANN, Gr. u. Röm. Porträts, Pl. 113.

<sup>&</sup>lt;sup>4</sup> Rőm Inst., No. 4780; Bieber, Jahrb. d. Inst., xxxii (1917), p. 22, Fig. 2.

<sup>&</sup>lt;sup>5</sup> Matz-v. Duhn, No. 3662; Hauser, op. cit., p.

<sup>35,</sup> No. 47; BIEBER, op. cit., p. 23, Fig. 3.

<sup>6</sup> B. S. A., iii (1896/7), p. 158, Pl. xii, b; Arch.

Anz., X (1895), p. 53, Fig. 10.

<sup>&</sup>lt;sup>7</sup> B. S. A., iii, Pl. xii, a; Joubin, Cat. des Sculpt. du Musée Impérial Ottoman (Constantinople, 1893), pp. 62 f., No. 143; Mendel, Musées Impériaux Ottomans, Cat. d. Sculptures, ii (Constantinople, 1914), No. 460.

Kallimachos ', and points out that the rich ornamentation of floral motives and Seilenoi stands in close relation to the Erechtheum and is suggestive of the designer of the palm tree and the Corinthian capital. This is true; nevertheless, the composition, although eclectic, is too free to be the work of the Katatexitechnos, and should be attributed to his pupil Praxias. There is a certain élan of movement which sweeps us on, away from the dignified processions of Kallimachos to a larger conception and outlook.

This greater breadth of treatment is more marked in the series of reliefs representing Apollo receiving a libation from a winged Nike while Artemis and Leto follow in his rear. Both goddesses closely resemble the nymphs in the relief of Pan and the Nymphs, with only a slight modification of the exaggerated swallow-tail folds, and a rounder, truer rendering of the anatomy. Apollo's kithara is identical in type with that of the Kertch relief, but is treated more ornately. Yet the present asymmetrical design must be mutilated, for the Nike should mark the centre of the field, and there ought to be at least three other figures on the right to counterbalance the divinities on the left. The composition is known from three complete examples, in the Villa Albani, in the Louvre and in Berlin (Pl. 75), and there are many replicas of isolated figures and of late adaptations 3.

It was, therefore, a well-known and favorite one and must have been exposed in some much frequented cult site. The scene is depicted as taking place before a low wall, flanked on the left by a high pilaster surmounted by a tripod; on the right, by a column bearing an athlete's statue. In two examples a plane tree grows just beyond the wall, and in all three reliefs a temple with Corinthian columns rises on the left, the architrave adorned with two tritons holding a shield with a gorgoneion. The composition is complete without the addition of the temple, which has been added by the copyist to identify the locality <sup>4</sup>. But why should the divinities parade before an earthly temple? Evidently because it was in some way connected with them, or else contained the original from which these reliefs are derived. Here the plane tree assists in the identification <sup>5</sup>, for it shows that Delphi, the great sanctuary of Apollo, is intended, and that here is the temple as known to the Neo-Attic copyist, schematised as on the coins <sup>6</sup>, with many

1 Masterpieces, p. 441.

<sup>2</sup> Schreiber, Hellenistische Reliefbilder, Pls. 34-36.

<sup>3</sup> REINACH, Rep. Stat., I, p. 21; Berlin Cat. Sculp., No. 922; Dutschke, Oberit., II, No. 472; Chase, Cat. Arretine Pottery (Boston, 1916), pp. 28 ff., Pls. III, IV, XXIX; Furtwaengler, Ant. Gemmen, Pl. LXV, No. 51; ivory relief, Ashmolean Museum, reproduced on our Pl. 73, Fig. 1.

4† The terracotta slabs which always reproduce the scene without the addition of the background are probably copied directly from the original instead of being a simplification of the marble reliefs. It is possible that the latter were adapted to serve as offerings by the

winners in musical contests rather than that the original work was designed for that purpose as suggested by Reisch (Weihgeschenke, pp. 24-27). Von Rohden, Architektonische röm. Tonreliefs, Pl. CXI, 2, 3, pp. 17 f.

<sup>5</sup> PLINY, Nat. Hist., XVI, 88; THEOPHRASTUS, Hist. Plant., IV, 13; BOETTICHER, Baumkultus, p. 132.

<sup>6</sup> GARDNER, J. H. S., VIII (1887), Pl. 74. x, 22-25. The artists have allowed themselves great latitude: on one coin the six-column temple appears as tetrastyle; the columns are now lonic, now Corinthian, and the pediment shows many variations. The only example which really attempts to reproduce it exactly shows a group of large figures which cannot be further identified.

PRAXIAS

99

details eliminated and only a few salient features, such as the Corinthian columns, retained.

Hence we may conclude that the main composition was the work of Praxias, a work localised at Delphi, connected with the sanctuary and depicting the Delphic Apollo himself. In a word, this composition fulfils Pausanias' description of the Eastern pediment:

"Artemis, Leto, Apollo and the Muses".

Probably the lost Muses resembled some such scheme as the three nymphs joining hands of the Corinthian Puteal, for the "Peitho" of the Kertch relief is the graceful female counterpart of the Dionysos of the Dresden Base.

The Western pediment is more difficult to recover, but the setting Sun in one angle must have been balanced by the rising Selene in the other, with the group of Dionysos and the Thyiades in the centre. Thus in a prominent position the two great Delphic cults were represented: Apollo, the vanquisher of the Python, and Dionysos, who reigned alone at the shrine during the three months that Apollo was absent among the Hyperboreans.

Some archaeologists have been perplexed to find the Dionysos of the Dresden Base and other types taken haphazard from the works we have attributed to Kallimachos introduced among other figures from an obviously later cycle as decorative motives on works of late date such as the amphora in Naples or the vase of Sosibios in the Louvre 1. Winter endeavours to prove that the original of the orginatic maenad with the slaughtered victim, who is shown on this vase and is best known from the relief in the Conservatori Museum, was a work by a master of the end of the fifth century, probably Kallimachos<sup>2</sup>. But such violence accords ill with the character of the sculptor as recorded by ancient writers, and recalls rather the art of Skopas. Pausanias mentions that Praxias died before the completion of the temple and that the work was finished by Androsthenes. Now this otherwise unknown Androsthenes was a contemporary of Skopas, and quite possibly was strongly influenced by that great master. What more probable than that in the Western pediment confided to his charge he introduced certain types borrowed from the cycle of Skopas, and at the same time, in order to bring his work into harmony with the earlier pediment of Praxias, he retained other figures, well-known in the series belonging to Praxias and his master Kallimachos? This would account for the apparent incongruity of choice of the Neo-Attic masters, because they did not commit the solecism of taking models from various cycles, but selected at random from either the East or West pediment. Furthermore they exaggerated the defects of the earlier art and failed

<sup>&</sup>lt;sup>1</sup> Mus. Borbonico, VII, Pl. 9; HAUSER, op. cit., p. 39, No. 55 and pp. 7 f., No. 1.

<sup>&</sup>lt;sup>2</sup> F. WINTER, Ueber ein Vorbild Neu-Attischer

to portray its stately rhythm, thus producing such works as the square base in the Museo Chiaramonti 1, or the relief which caricatures the Villa Albani slab 2.

Kallimachos has been proposed as the creator of the original relief showing dancers crowned with the *kalatbiskos*, known from many copies <sup>3</sup>. In the earliest and best examples <sup>4</sup>, these maidens certainly resemble the Nike of the Kitharoidos reliefs in their rhythm and poise, but that would assign them to Praxias rather than to his master whose Saltantes Lacaenae must have trod a far more solemn and dignified measure.

The Altar of the Twelve Gods in the Louvre <sup>5</sup> derives from a different series of models; the figures, which are squarely built and stand firmly on their feet, are presented frontally instead of in profile after the invariable habit of Kallimachos. An original work of this other school is the fragment of a God (Zeus?) in the Athens Museum <sup>6</sup> where the folds are treated as a series of thick pleats as exemplified by the drapery of the Seasons, the Eileithyiai and Hephaistos of the Louvre altar.

I have sought to prove in this short article that only by studying the works of his master can we arrive at a knowledge of the style of Praxias, and, moreover, that such a study reveals the fact that in the series of reliefs known as the Kitharoidos reliefs we have a mutilated version of the West pediment of the Delphic sanctuary, the chief and final work of Praxias. After his death the East pediment was finished by Androsthenes, who combined certain types taken from his predecessor's cycle with other types from his great contemporary Skopas. The art of Kallimachos and his followers became the stock models of the Neo-Attic school, who conventionalised and exaggerated their patterns until they lost all the delicacy and grace for which the originals were justly famed.

December 1918.

<sup>&</sup>lt;sup>1</sup> AMELUNG, Kat., I, Pl. 45, No. 182.

<sup>&</sup>lt;sup>2</sup> Winckelmann, Opere, Pl. 85.

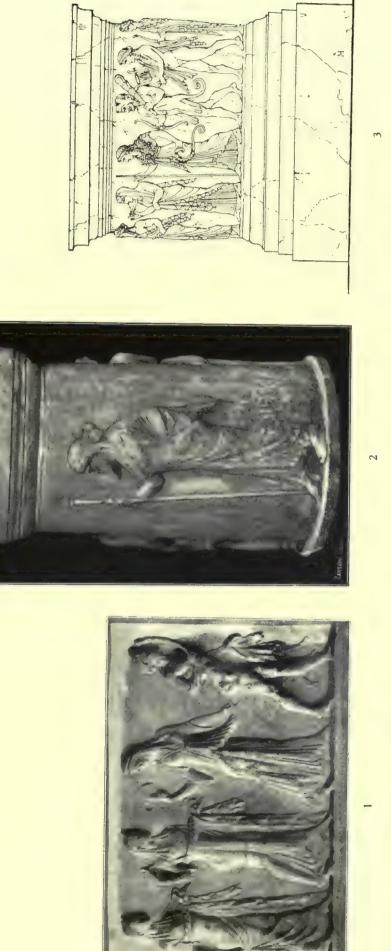
<sup>&</sup>lt;sup>3</sup> ZOEGA, B. 'R., I, Pls. 20 and 21; CLARAC, Musée, II, Pls. 167 and 168; Moses, Vases, Altars etc., Pl. 60; CHASE, Cat. Arretine Pottery, (Boston, 1916), pp. 53 fl., Pls. X, XI; Loeb Coll. of Arretine Pottery, (New York,

<sup>1908),</sup> Pls. III, XVI.

<sup>&</sup>lt;sup>4</sup> Kekulė v. Stradonitz, *Die Gr. Skulpt.* (1907), pp. 139 ff.

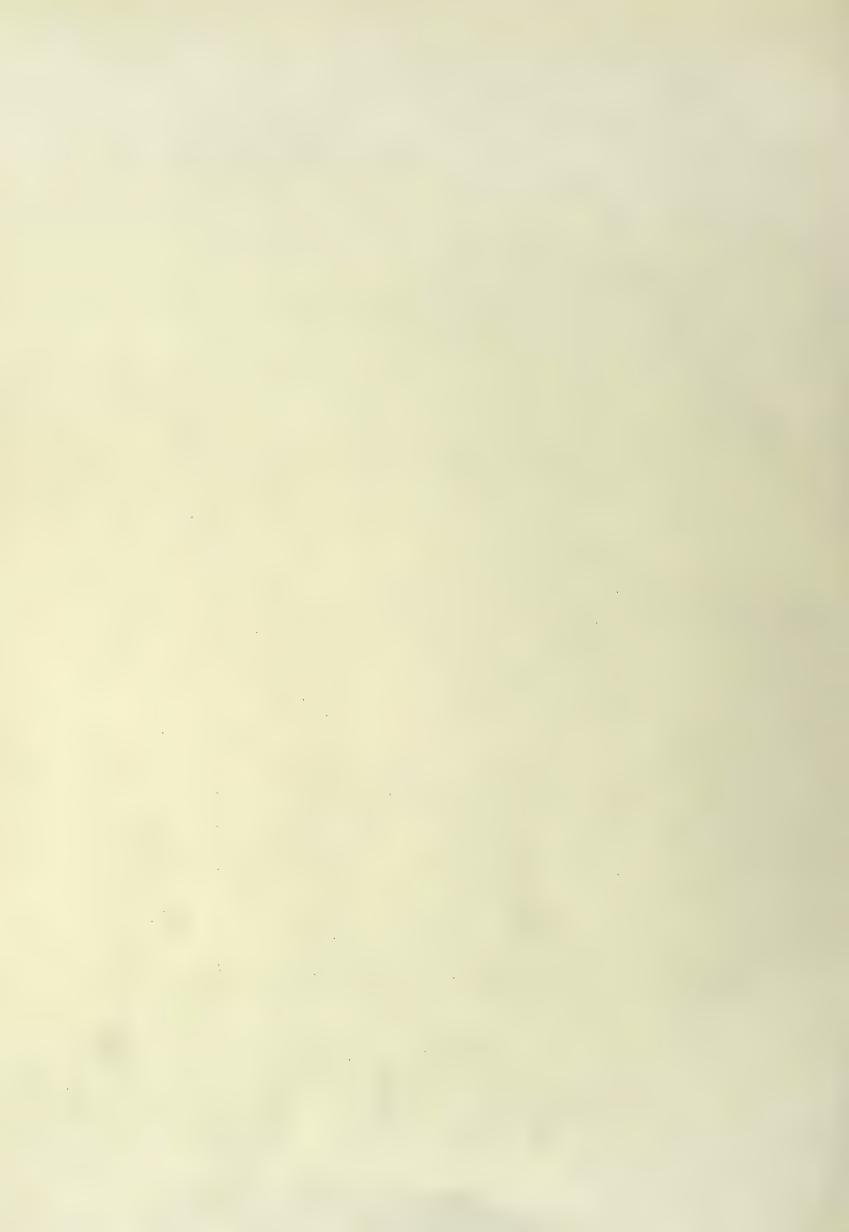
<sup>&</sup>lt;sup>5</sup> CLARAC, Musée, Pls. 173 and 174.

<sup>&</sup>lt;sup>6</sup> Svoronos, Athener Nat. Mus., Pl. 21, No. 95, p. 101.



1, Relief by Kallimachos, Capitoline Museum. 2, Base in Torlonia Collection, Rome.

3, Base in Capitoline Museum.



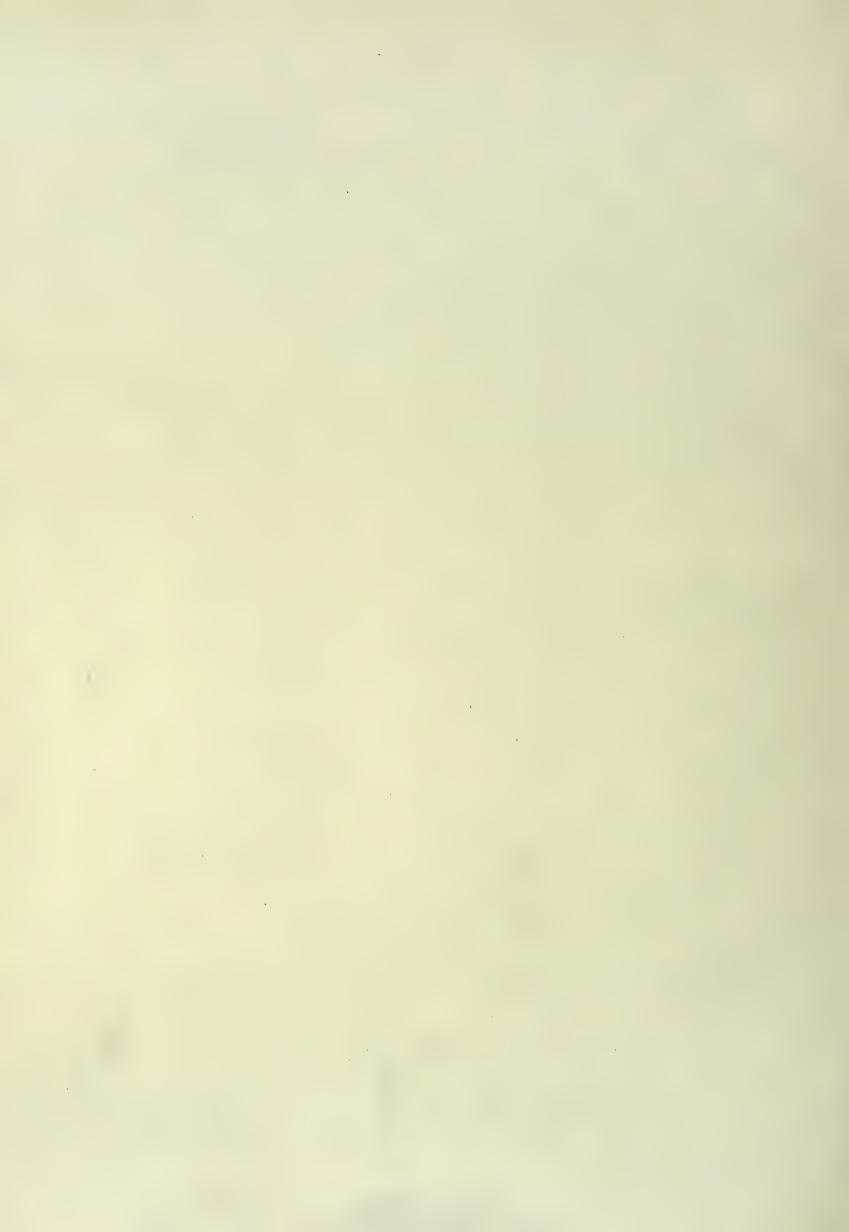


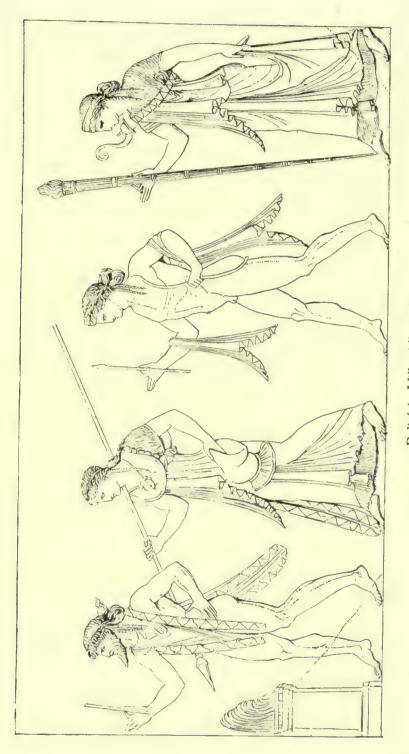
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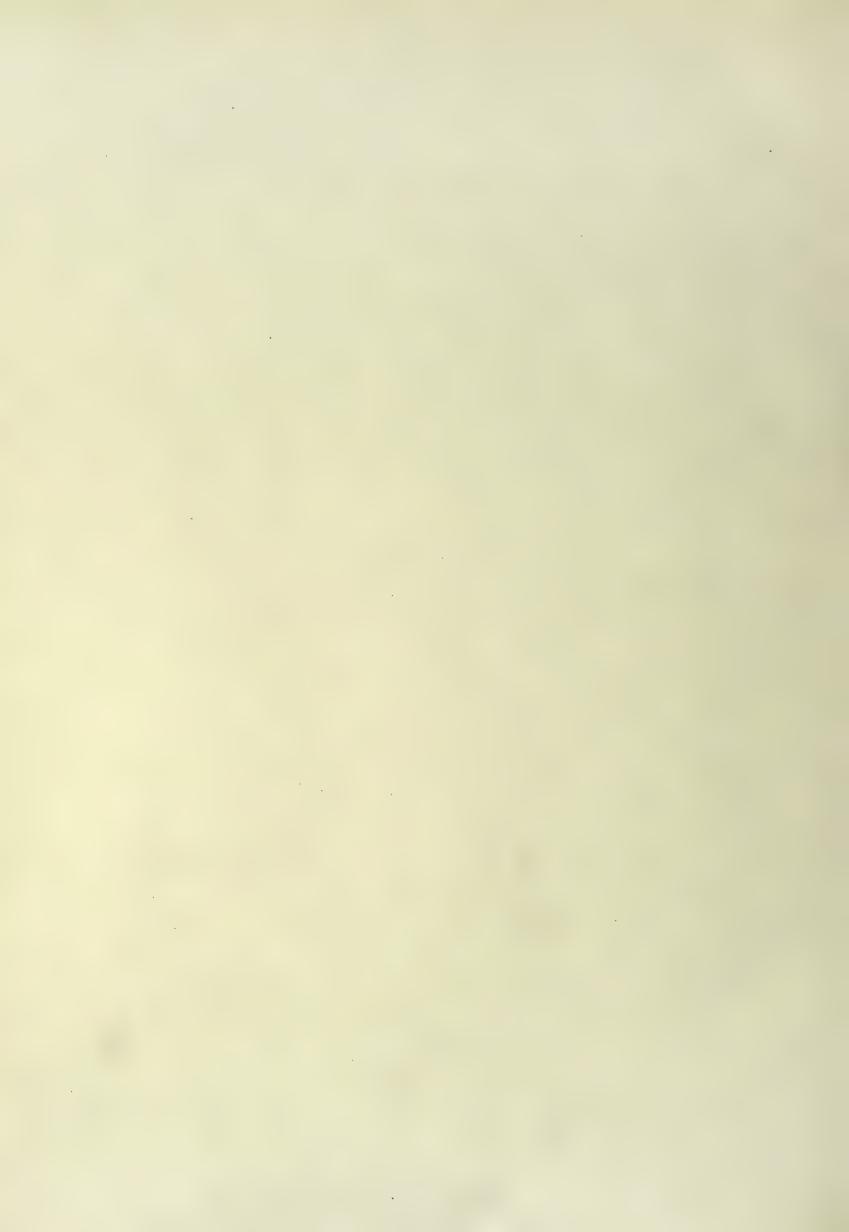
1, Ivory relief, Ashmolean Museum.

2, Bas-relief from Kertch, Odessa Museum.



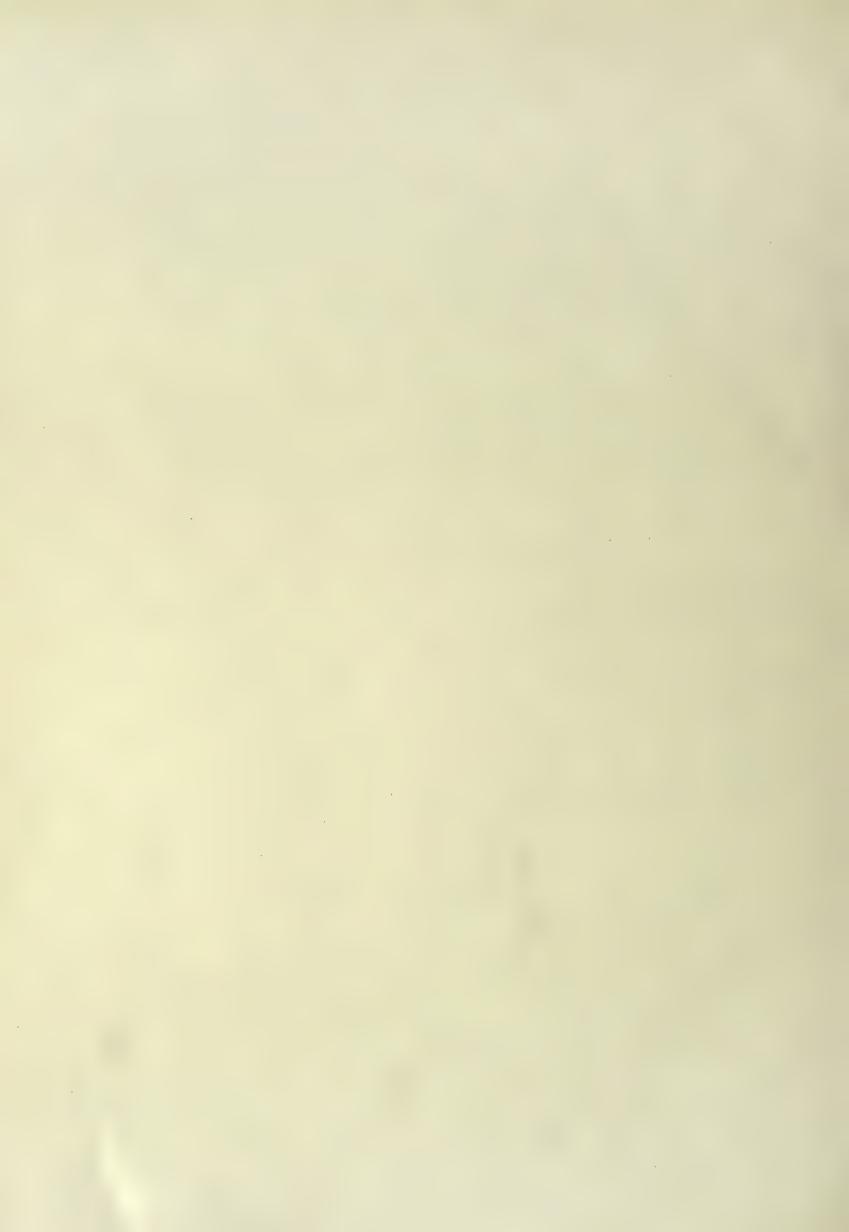


Relief in Villa Albani, Rome.





Relief, Berlin.



### WORK OF THE SCHOOL OF FINE ARTS.

(PLATES 76-91)

HIS year the plates showing the work of the School of Fine Arts have been selected for the purpose of giving a comprehensive idea of its different departments and of the variety of opportunity which the Academy affords.

As shown by Plates 76 to 80, for example, the architects devote most of their attention to the monuments of Greece, Rome and the Italian Renaissance. On the other hand landscape architects are expected to make themselves familiar with Italian gardens (See Pl. 81) before taking up the study of French and English examples.

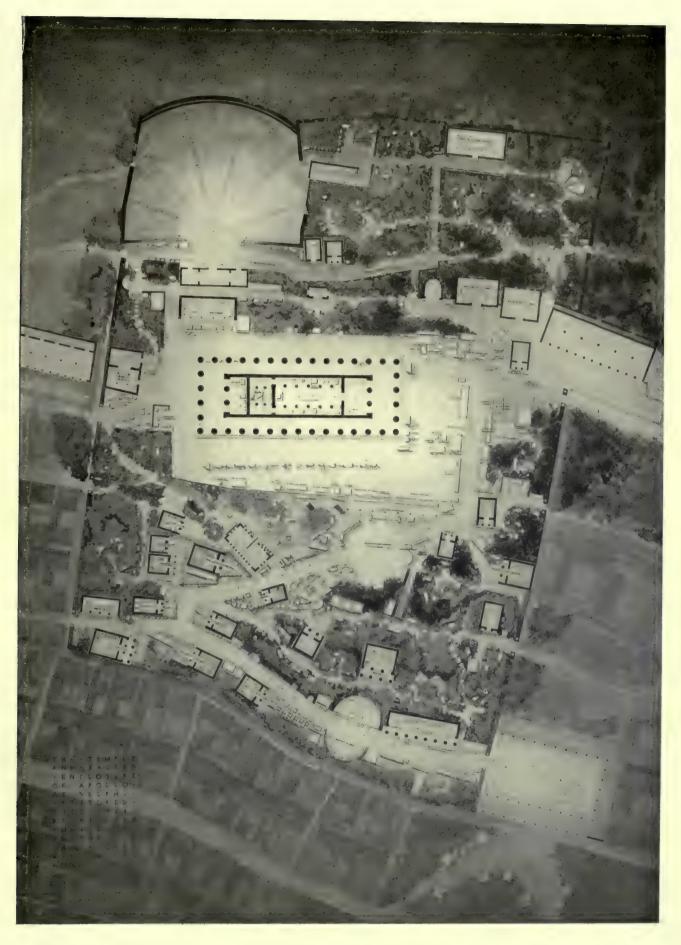
Each of the sculptors during his three years of residence is required to produce a relief (Pl. 82), a figure in the round (Pls. 83, 84), and a group (Pl. 85).

The painters, in addition to their original compositions, are expected to make copies of paintings by the old masters (See Pls. 86, 87). Furthermore especial emphasis is placed upon the relation of pictorial and sculptural decoration to architecture, as is shown on Plate 88. Instruction in the art of fresco painting is also available (See Pl. 89).

There is no better place than the American Academy in Rome for the study of collaborative problems between architects, sculptors and painters. Our artists, living under the same roof, and working together upon the various problems set for them to solve, soon learn to understand each other's abilities and limitations. An example of this branch of the work is shown on Plate 90. Actual models, so important for attaining satisfactory results in the case of many works of art, are also frequently made (See Pl. 91).

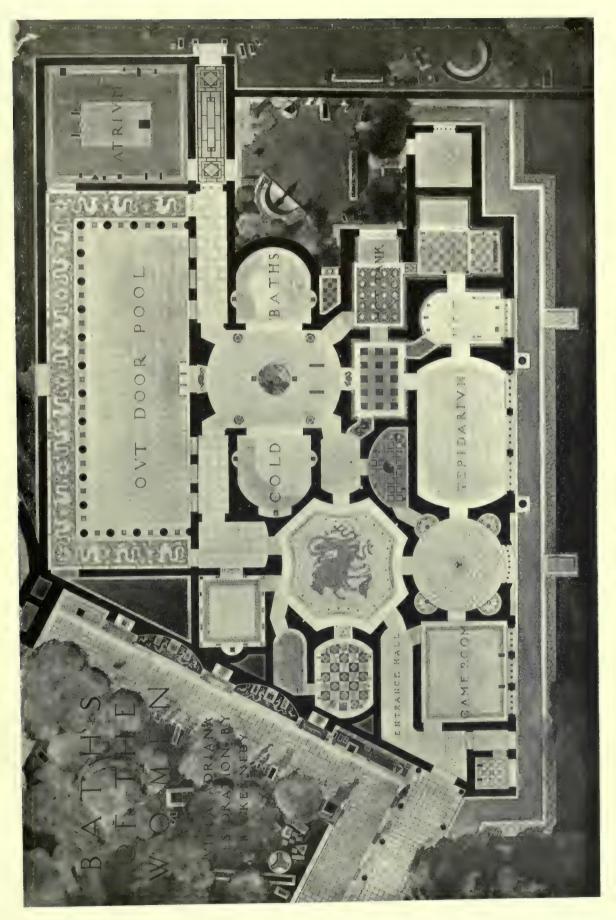
The object of the School of Fine Arts is to discover the best available material among America's young artists, and to bring together a group of talented young men in quiet attractive surroundings, with the chefs-d'oeuvre of the great masters as a background. We firmly believe that thus removed from the usual struggle for existence, and from such commercial influences as predominate in America they will develop to the fulness of their powers, and will come to realize that it is their important mission in life to help to raise and sustain throughout the United States what is needed there perhaps more than anywhere else in the world, namely, a high and consistent standard of art.



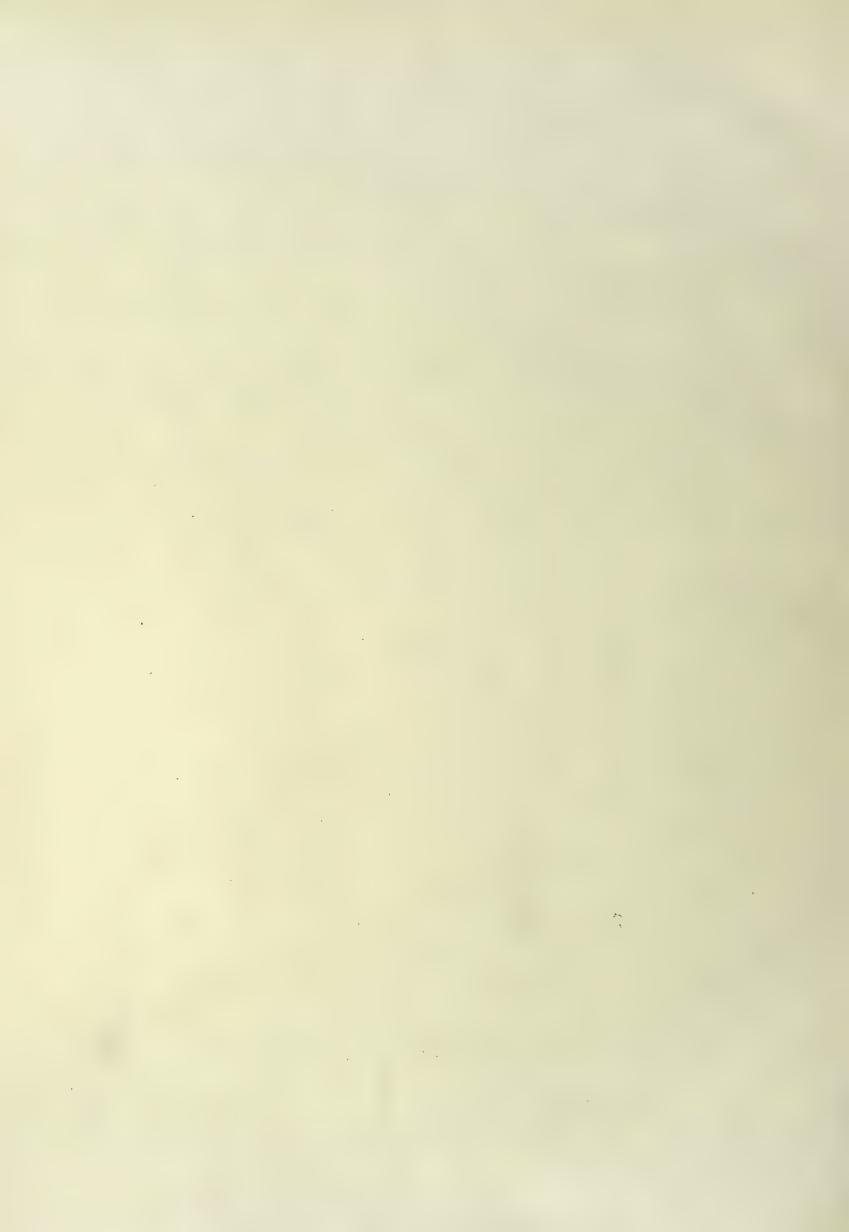


Plan of Delphi. Richard H. Smythe, Fellow in Architecture, 1910-1913.





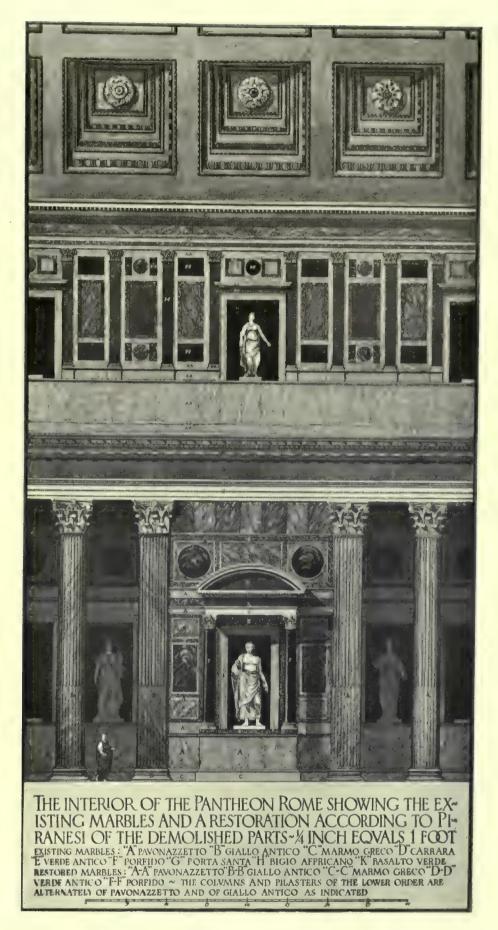
Women's Baths at Hadrian's Villa, plan (scale 1:290). Raymond M. Kennedy, Fellow in Architecture, 1916-1919.



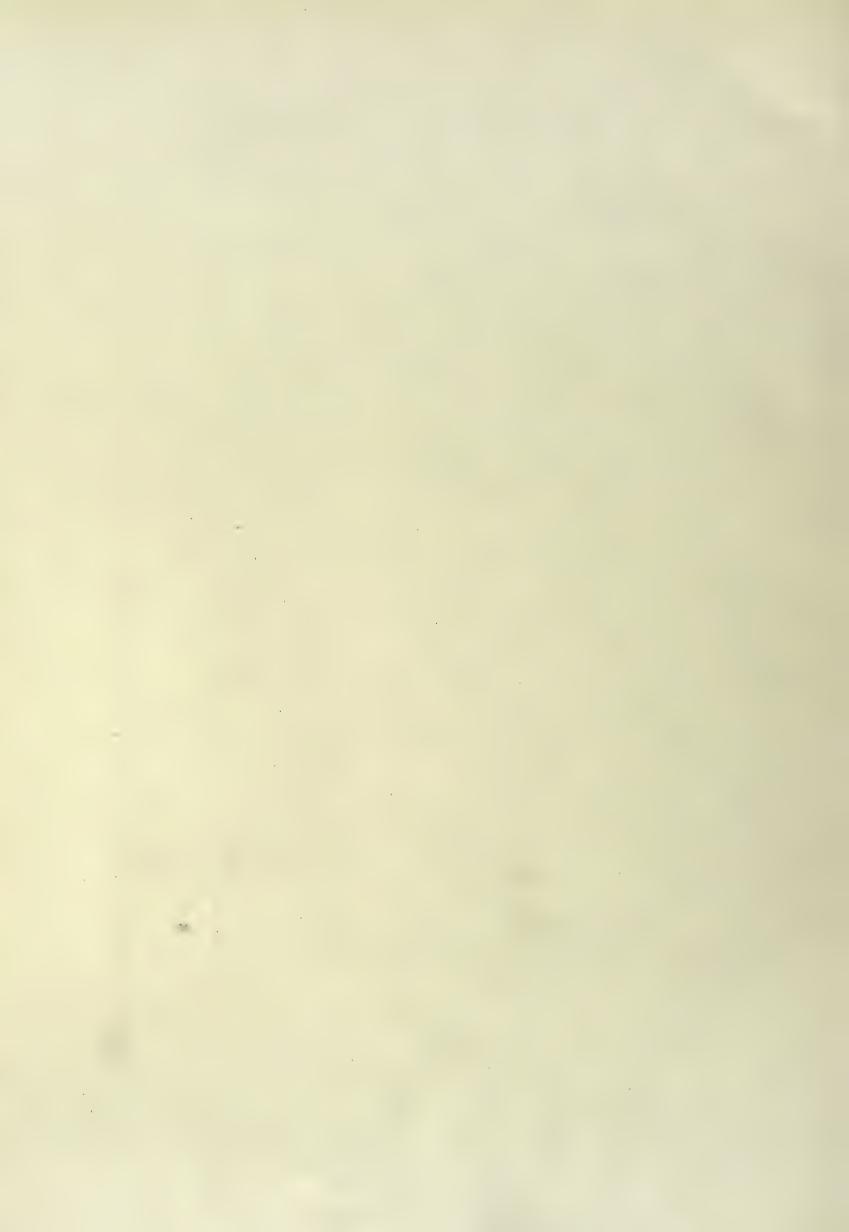


Plan of Isola Bella. Edgar I Williams, Fellow in Architecture, 1909-1912.



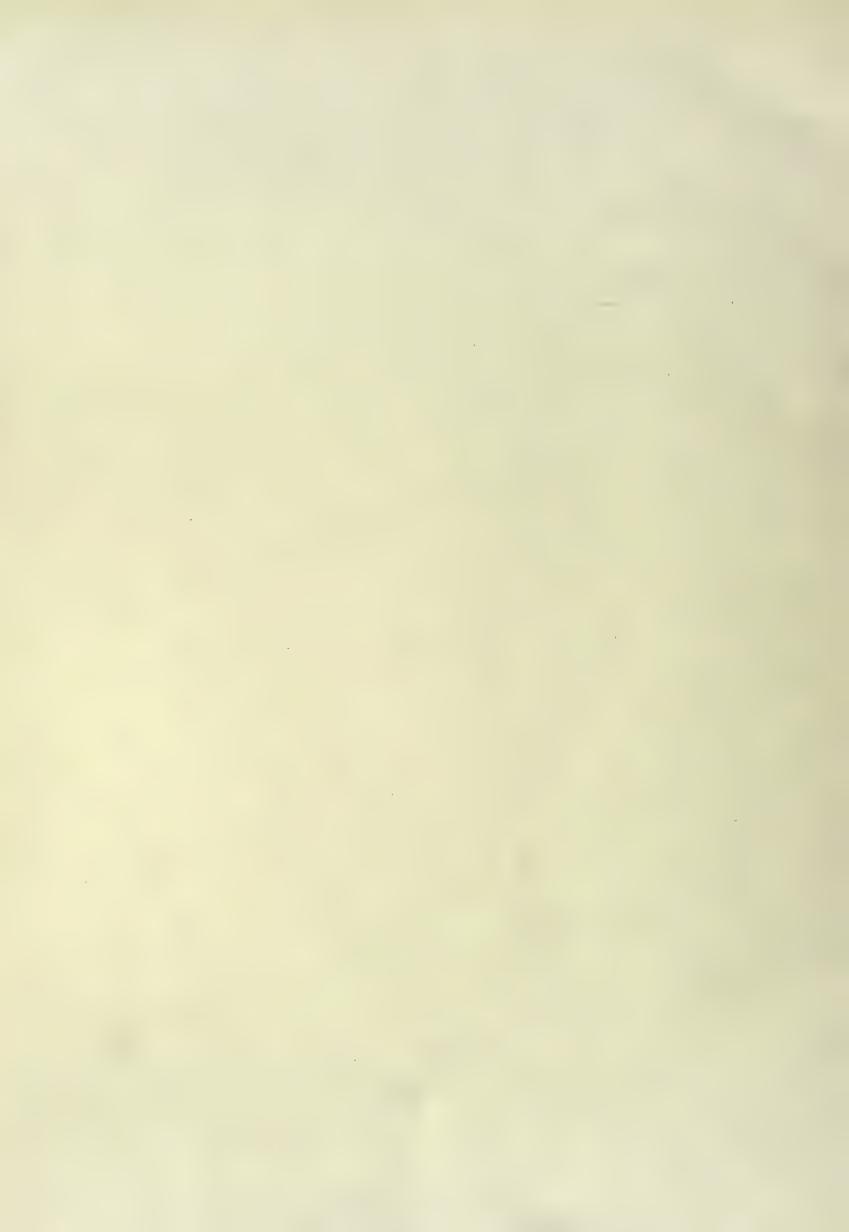


Interior of the Pantheon.
William J. H. Hough, Fellow in Architecture, 1914-1917.





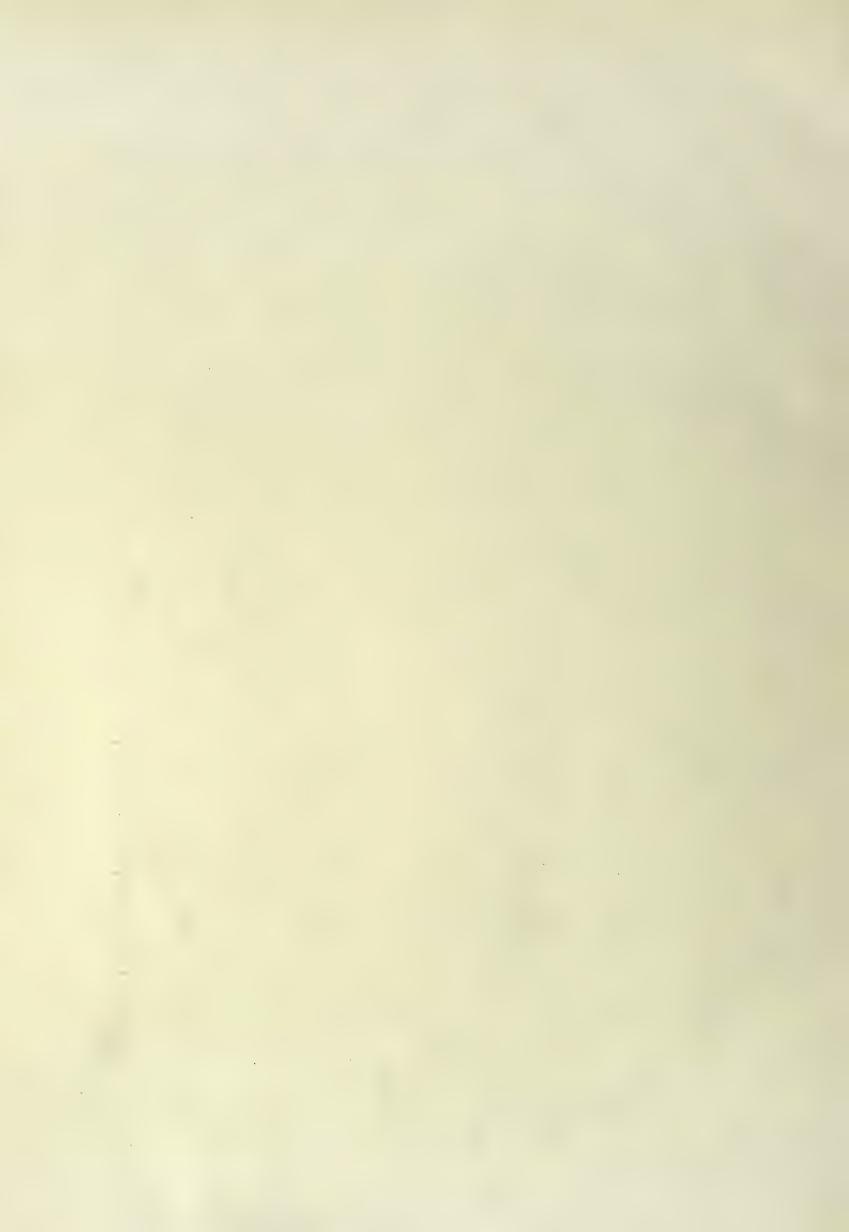
Villa Lante. Philip T. Shutze, Fellow in Architecture, 1915-1918.





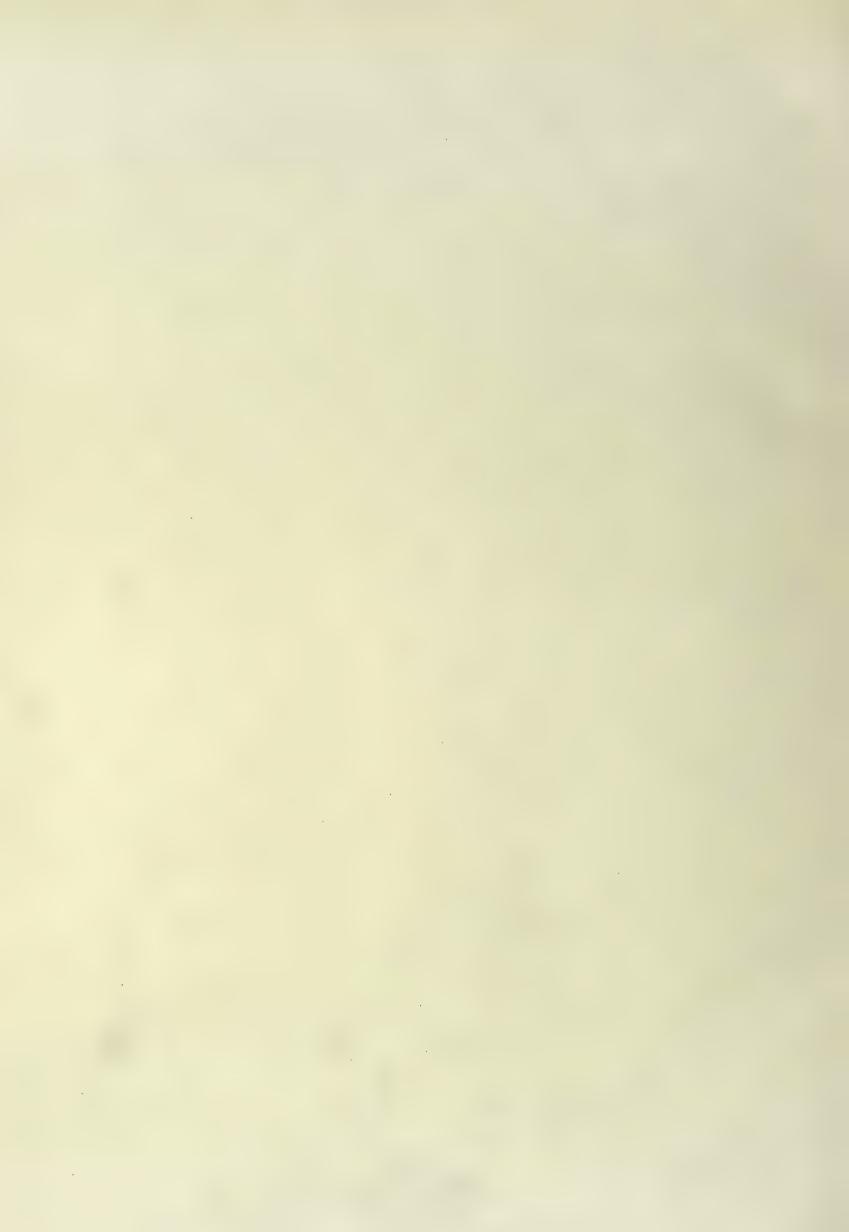
Entrance Gate, Villa Borghese.

Edward G. Lawson, Fellow in Landscape Architecture (American Society of Landscape Architects), 1915-1918.



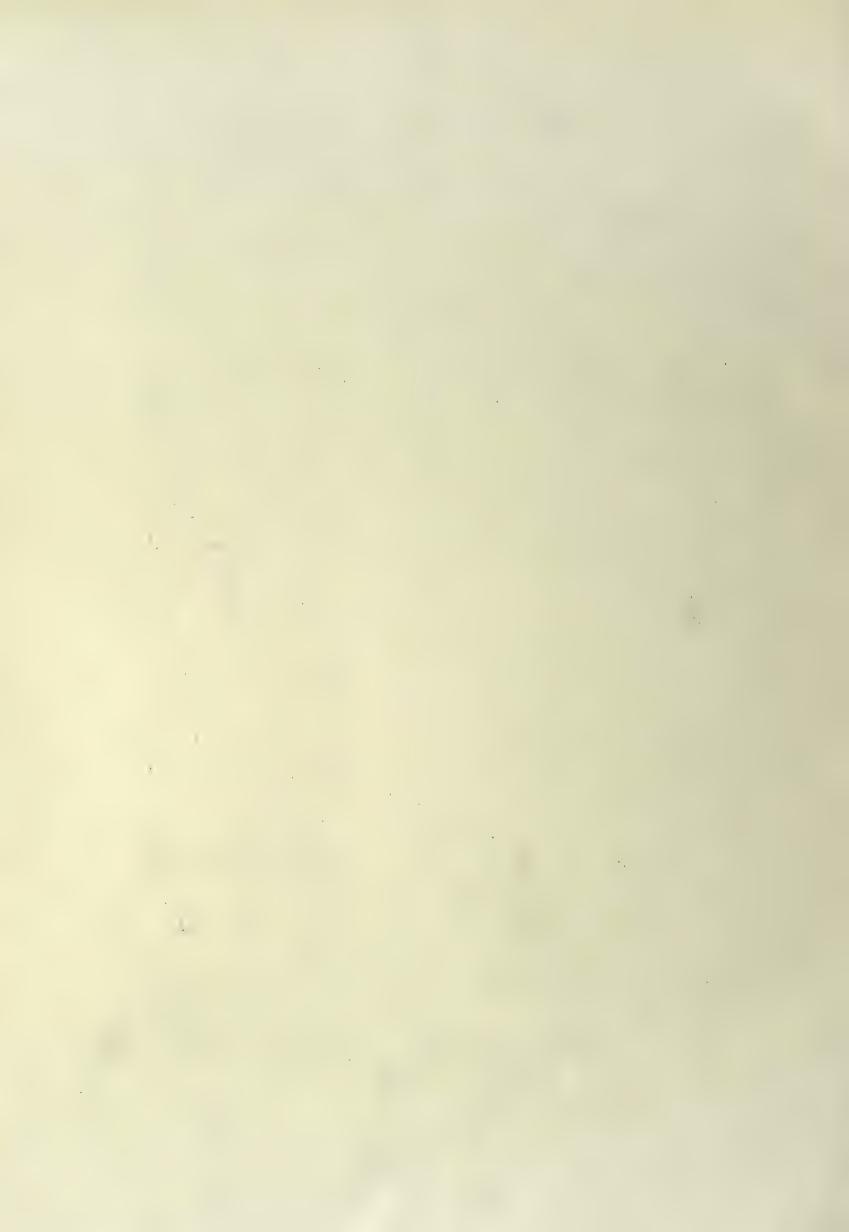


Relief. Joseph E. Renier, Fellow in Sculpture, 1915-1918.



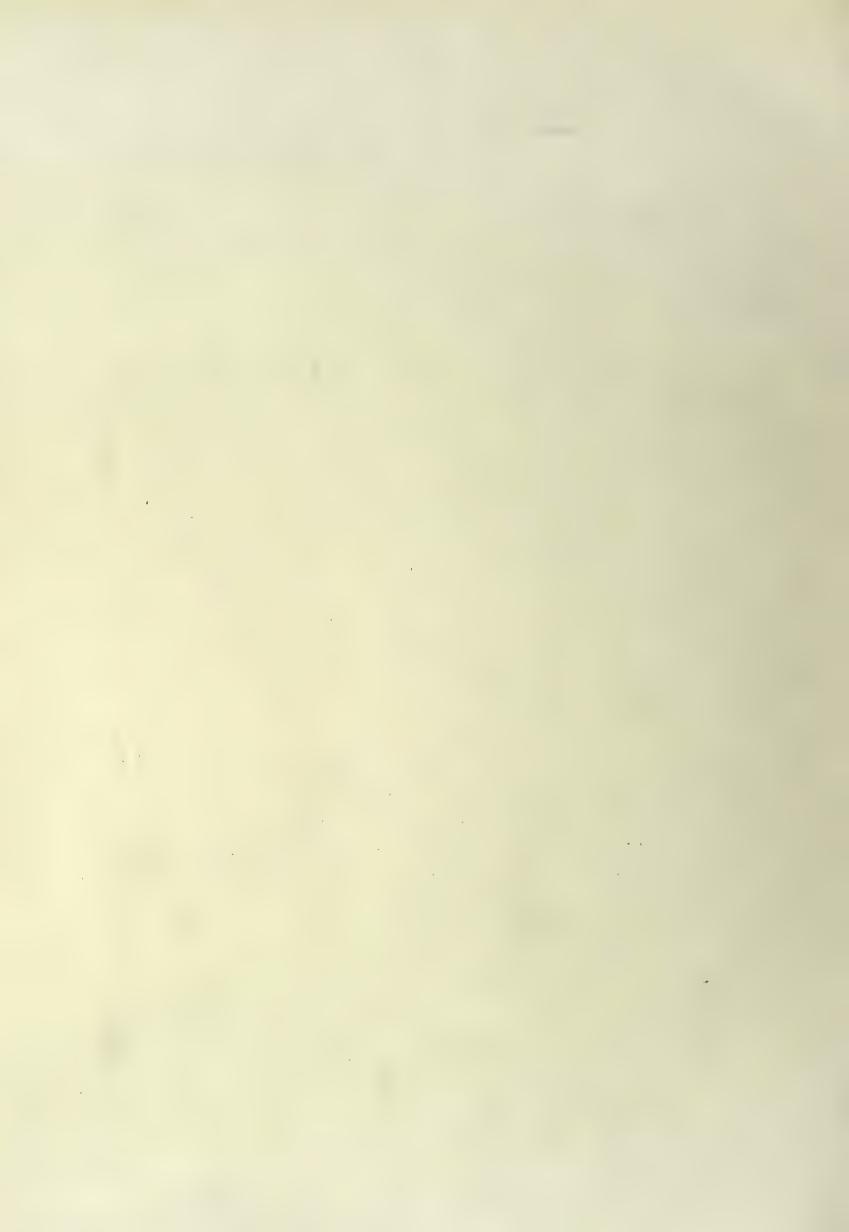


Sower. Albin Polasék, Fellow in Sculpture, 1910-1913.





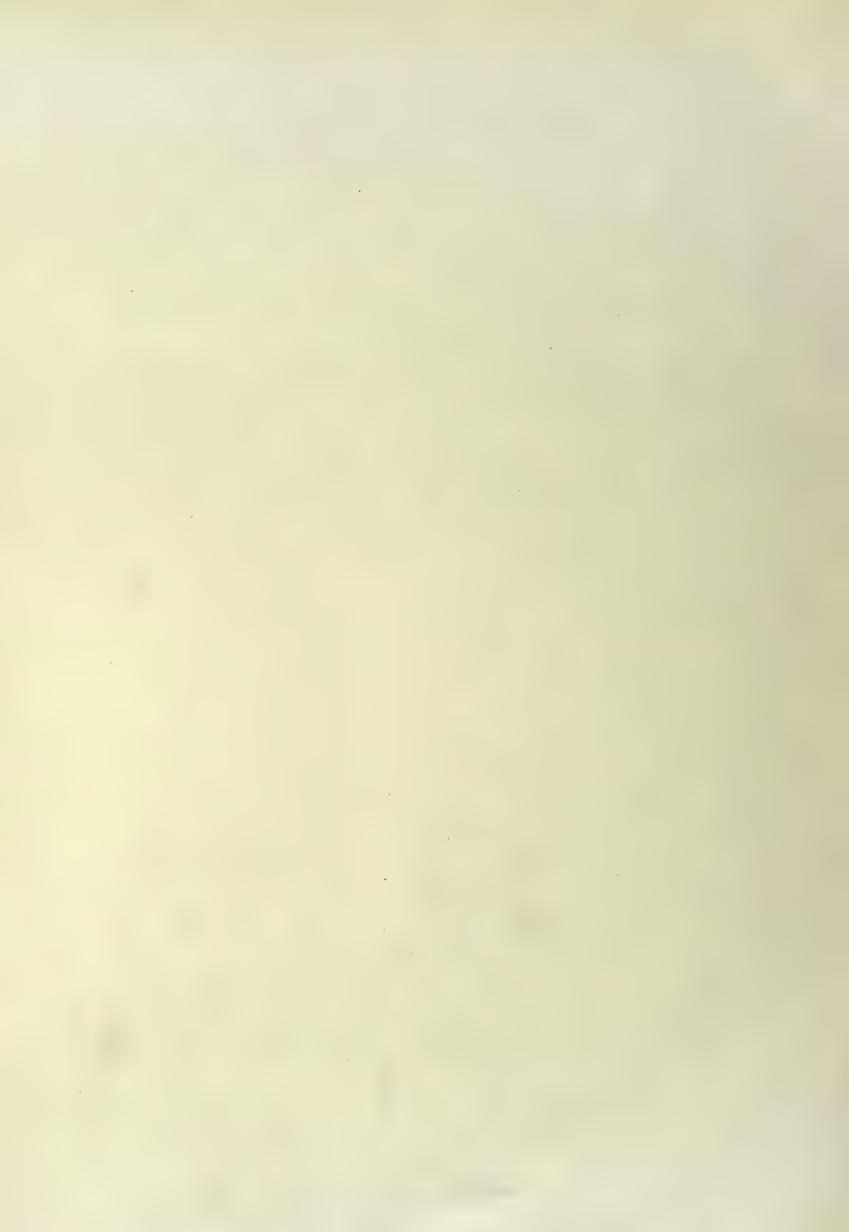
Duck Girl.
Paul H. Manship, Fellow in Sculpture, 1909-1912.





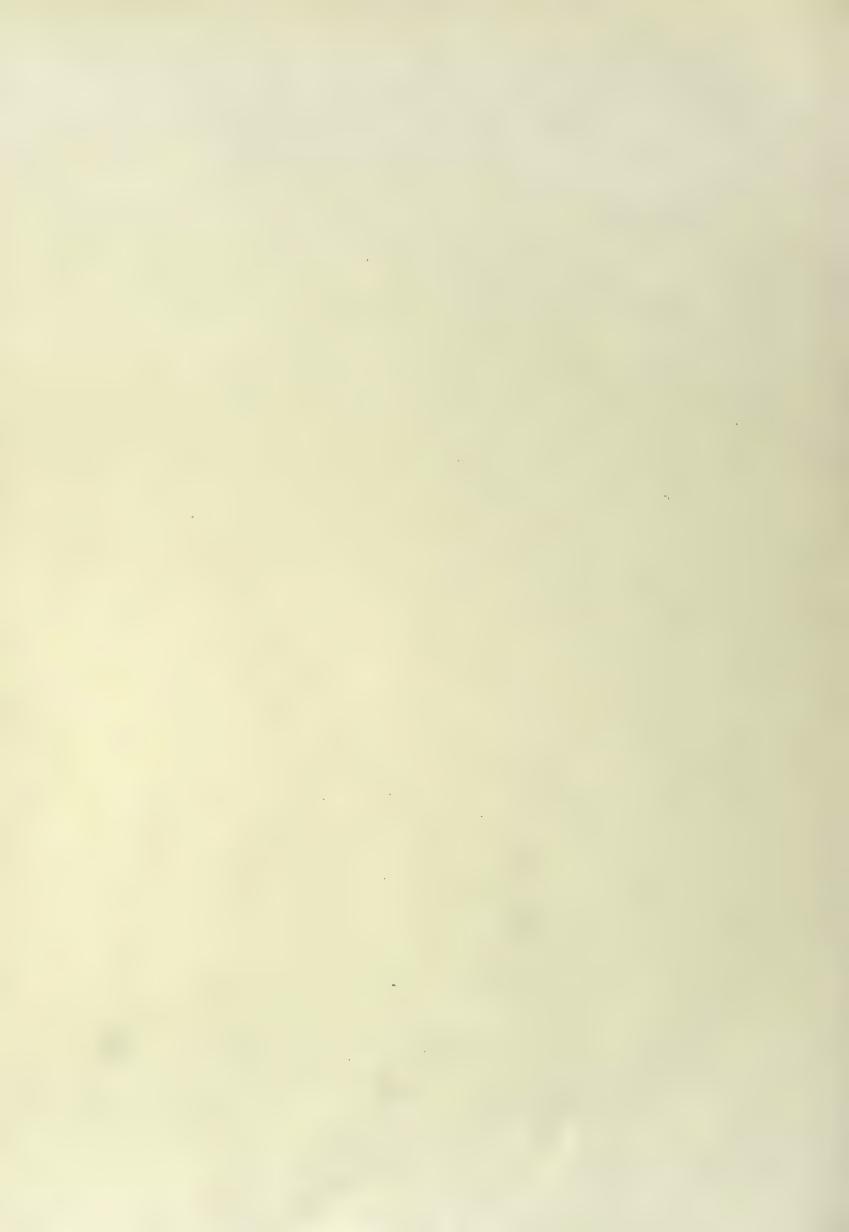
Cupid and Gazelle.

Carl P. Jennewein, Fellow in Sculpture, 1916-1919.





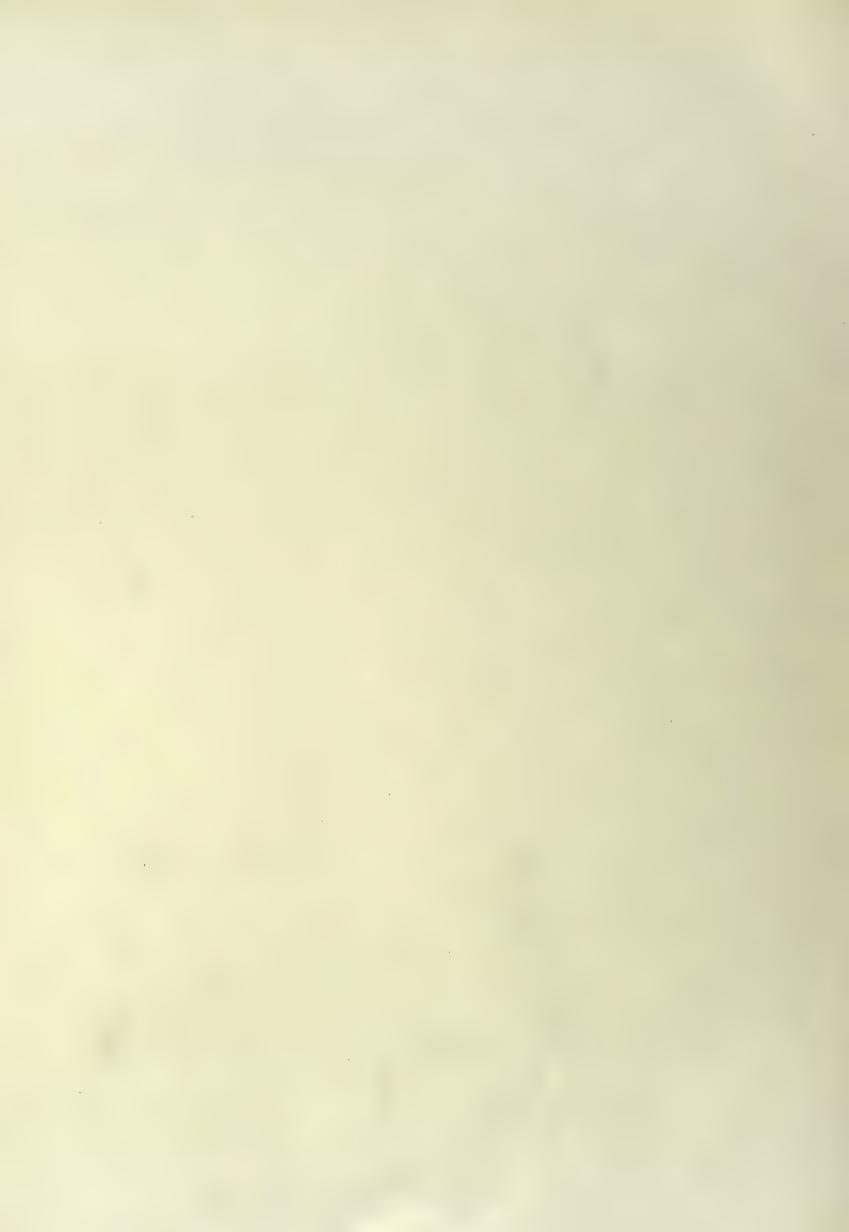
Copy, Portion of Raphael's *Incendio*, Vatican. Ezra A. Winter, Fellow in Painting (Lazarus), 1914-1917.





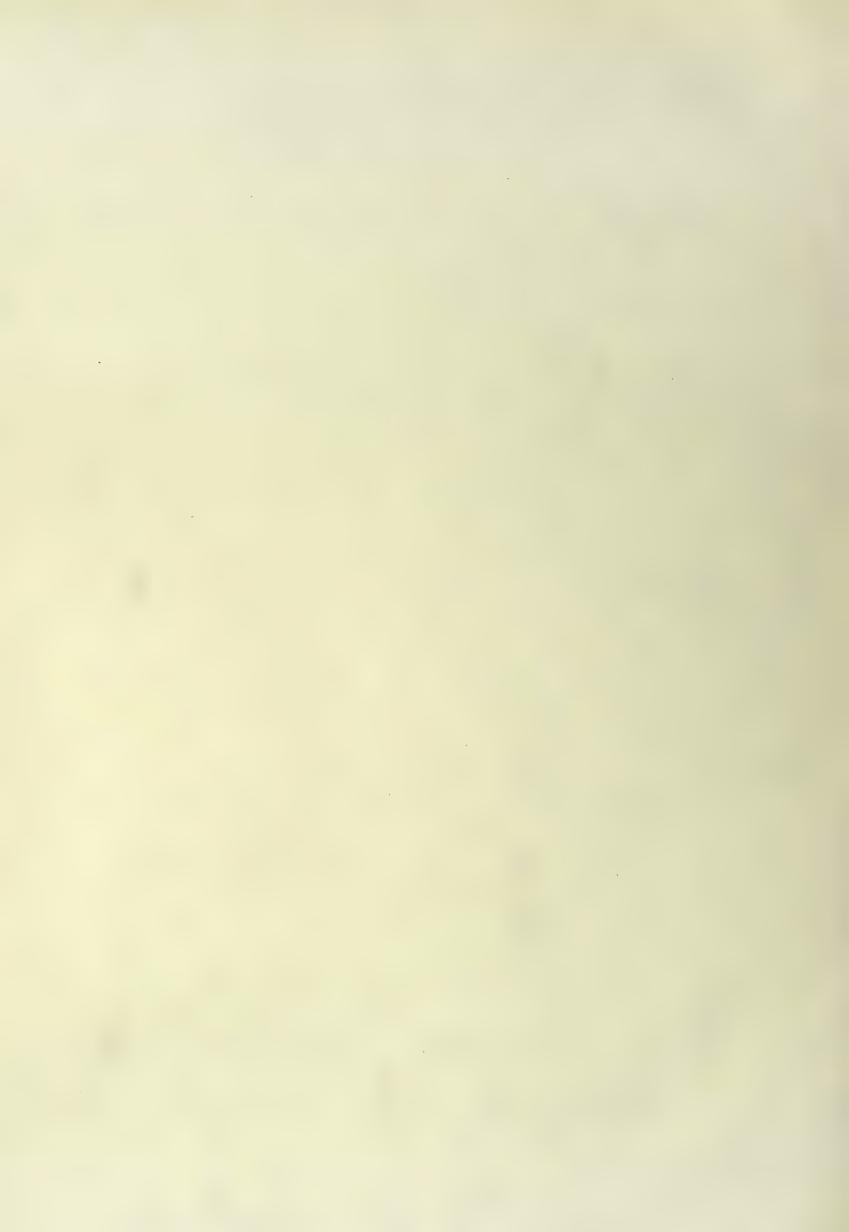
Five Figure Composition.

Harry I. Stickroth, Fellow in Painting (Lazarus), 1914-1917.





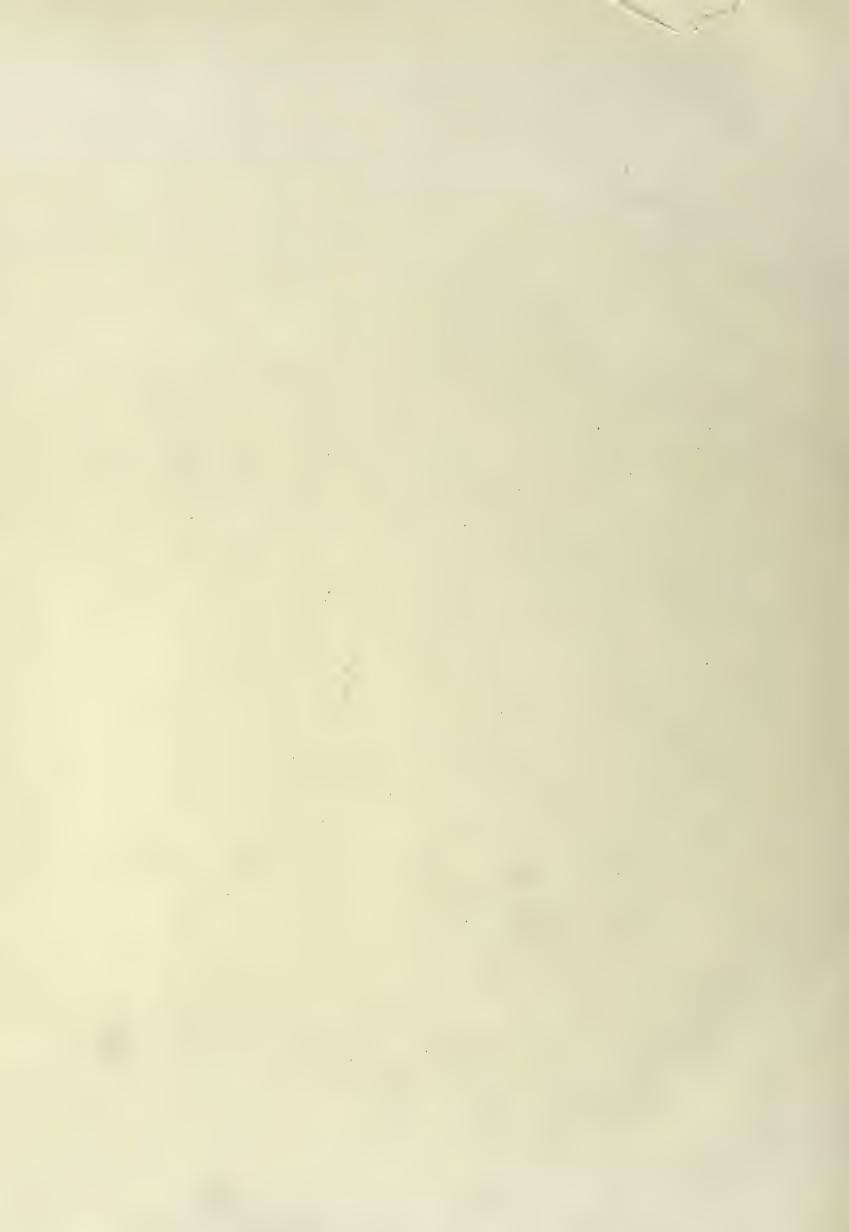
Piccolomini Library, Siena. Ezra A. Winter, Fellow in Painting, 1911-1914.





Study in Fresco.

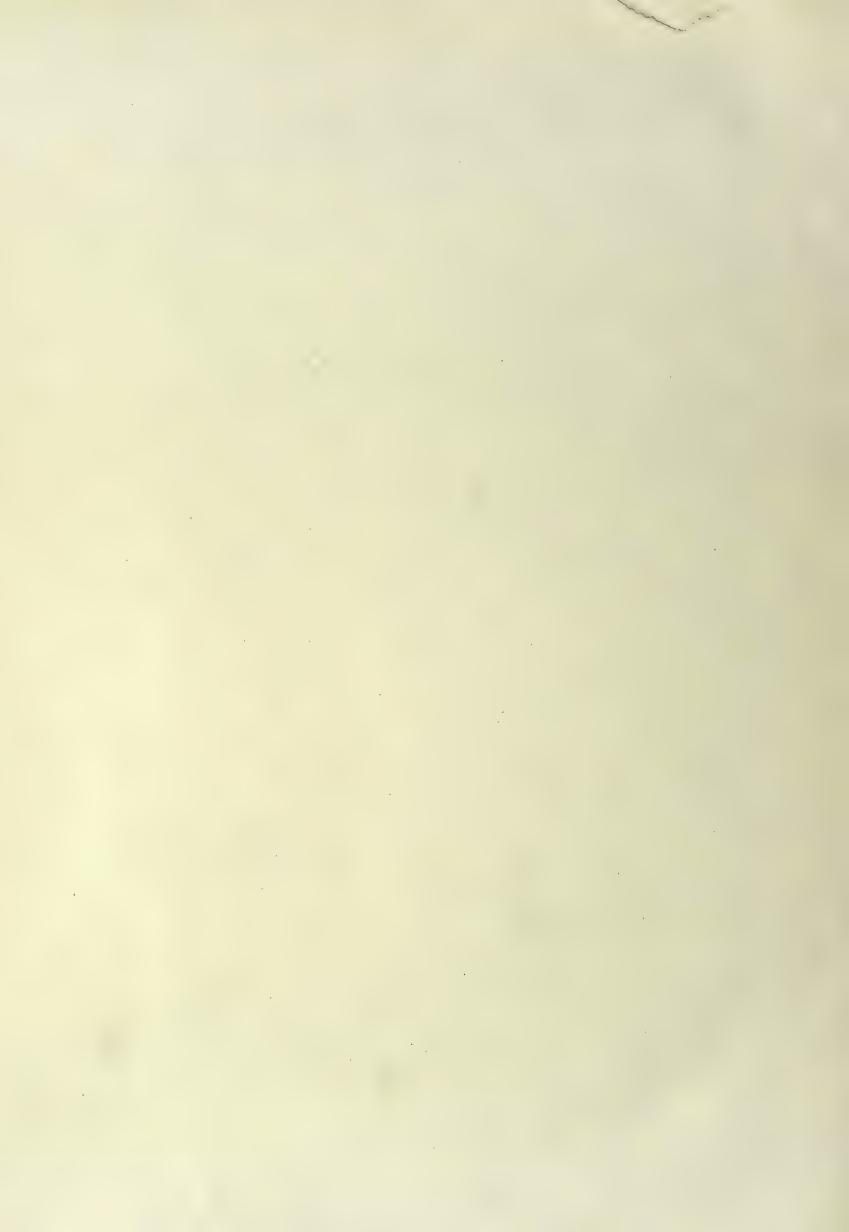
Eugene F. Savage, Fellow in Painting, 1912-1915.





Collaborative Problem, 1914-1915.

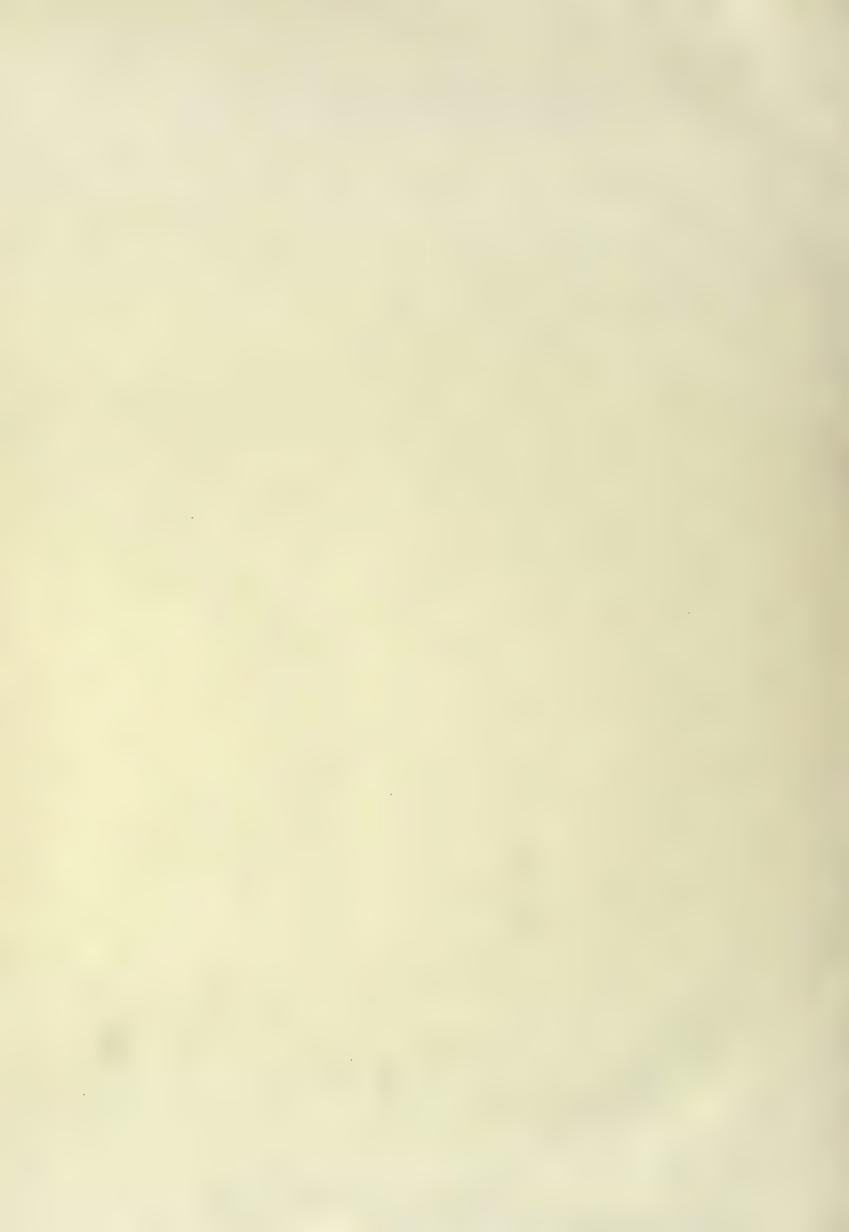
Walter L. Ward, Architect. Berthold Nebel, Sculptor. Eugene F. Savage, Painter.





Model of a Scheme for Improving the Approach to St. Peter's.

Erich Gugler, McKim Fellow in Architecture from Columbia University, 1913-1915.



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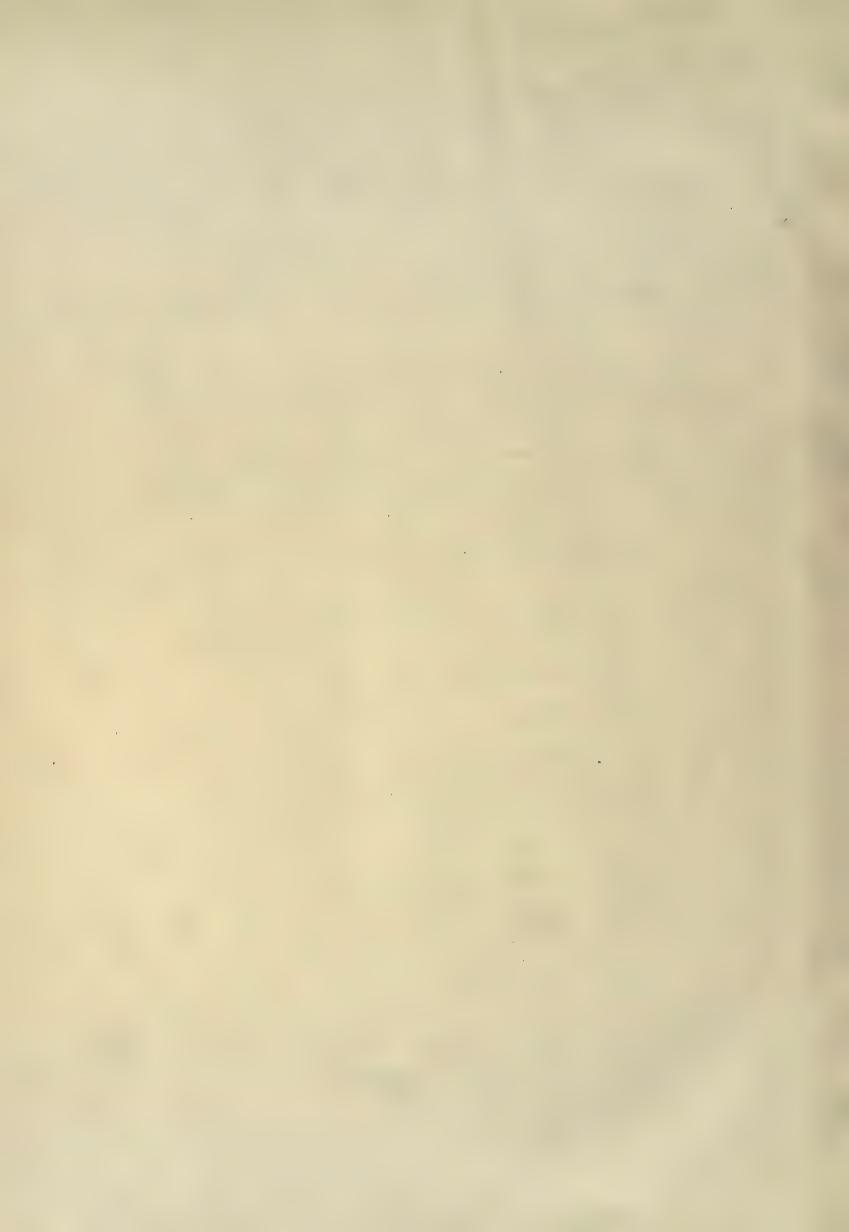
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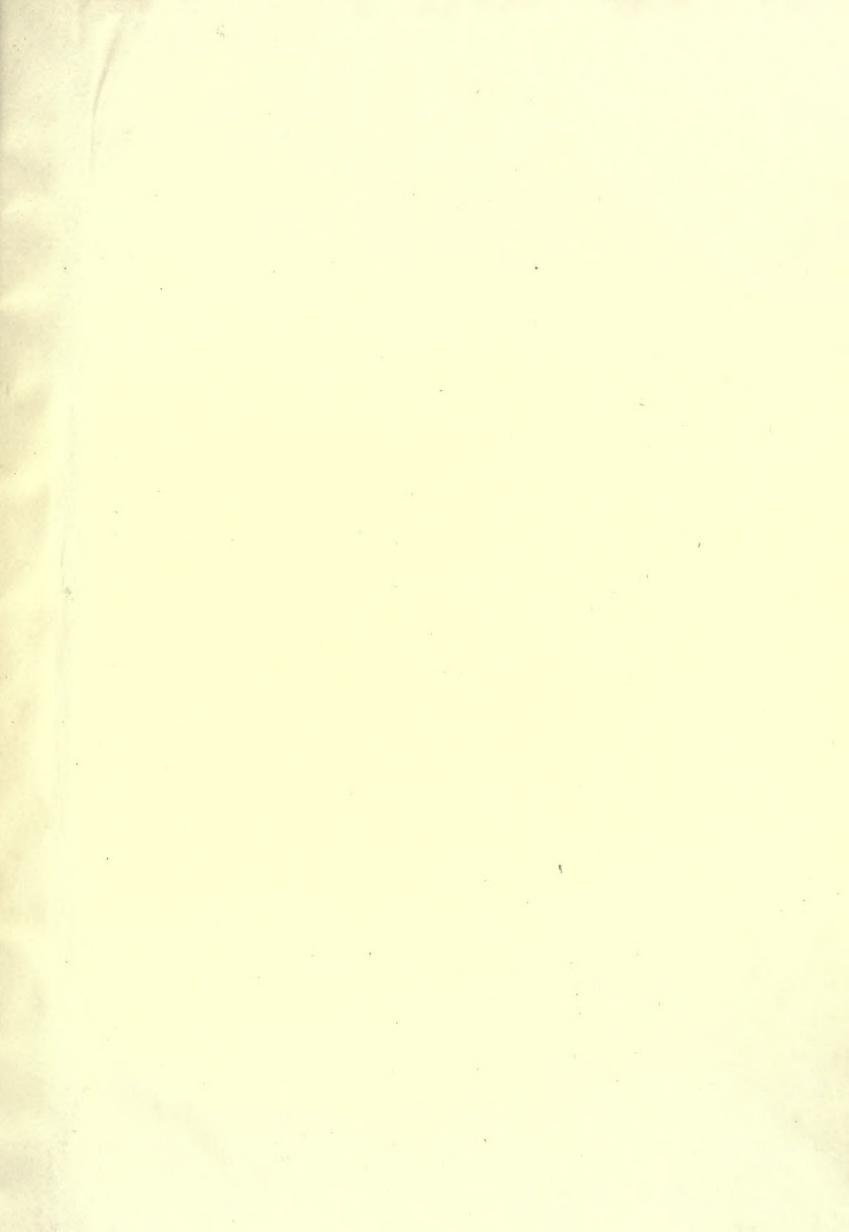
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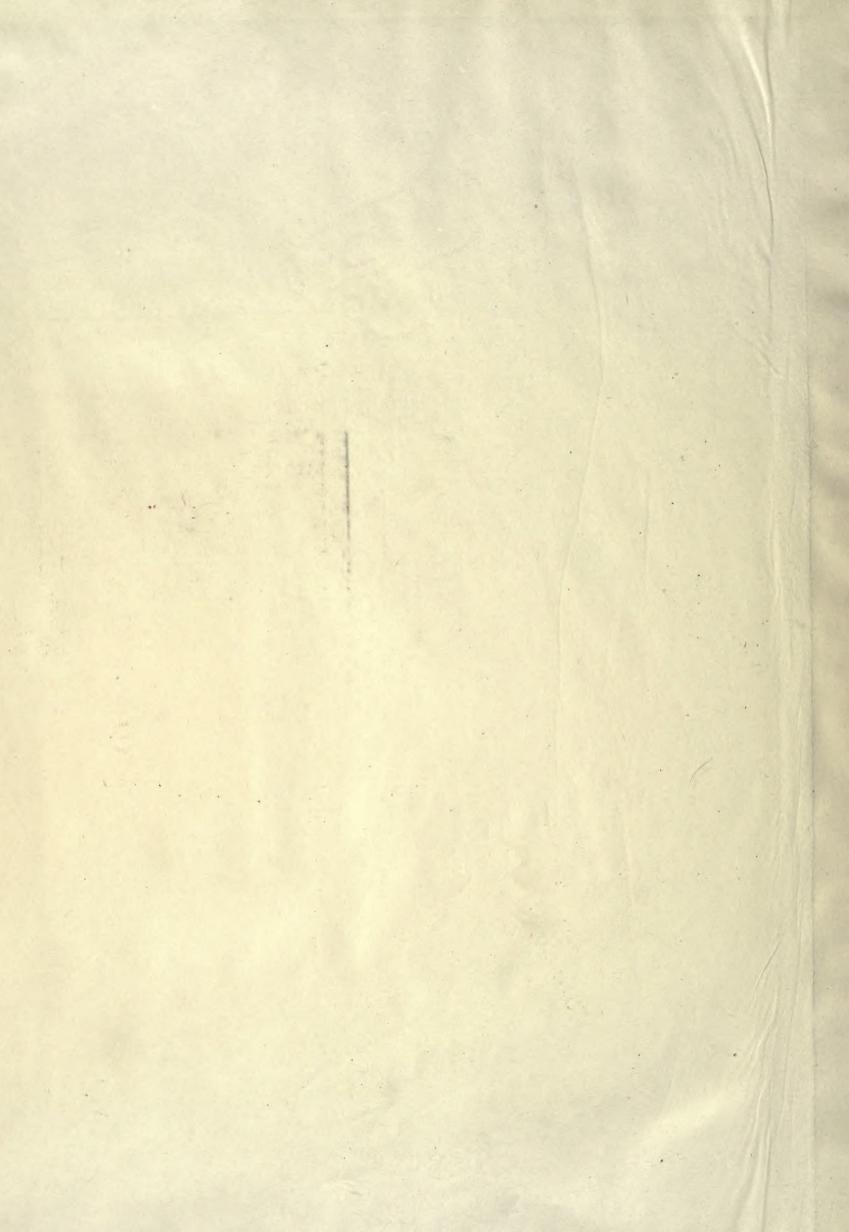
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